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ABSTRACT

The needs of Ohio schools were assessed in relation to the area of Family Life Education, including education in sexual behavior, the prevention of alcohol, drug, and smoking abuse, and related social problems. The study was carried out in two phases. The first phase developed the methods for assessing the needs of Ohio schools, which involved defining "need" and developing the procedures for carrying out operations indicated by the definition. To determine the developments desired, one task force located and prepared summaries of studies of non-constructive and constructive behavior related to the four areas, and located tests to probe for critical factors. Another task force examined recent research, thinking and practice as to optimal school experiences and selected the curricular offerings to be examined. From the reports of the task forces, the items to be assessed were assembled, and are presented in terms of a General Overview and Developments Desired in Detail. A survey was conducted to ascertain the influence of the learning experiences on knowledge and attitudes of children and to determine the knowledge and attitudes of teachers as related to the areas in which the students were tested. A total of 11,590 students (6,283 beginning 7th graders and 5,307 beginning 12th graders) were tested. Teachers, principals, and curriculum coordinators were surveyed. The results are tabulated and discussed. It is concluded that, in the areas of the social problems of youth with which the survey was concerned, the student receives little help in understanding and identifying the difficulties that give rise to abuse behavior. (DB)

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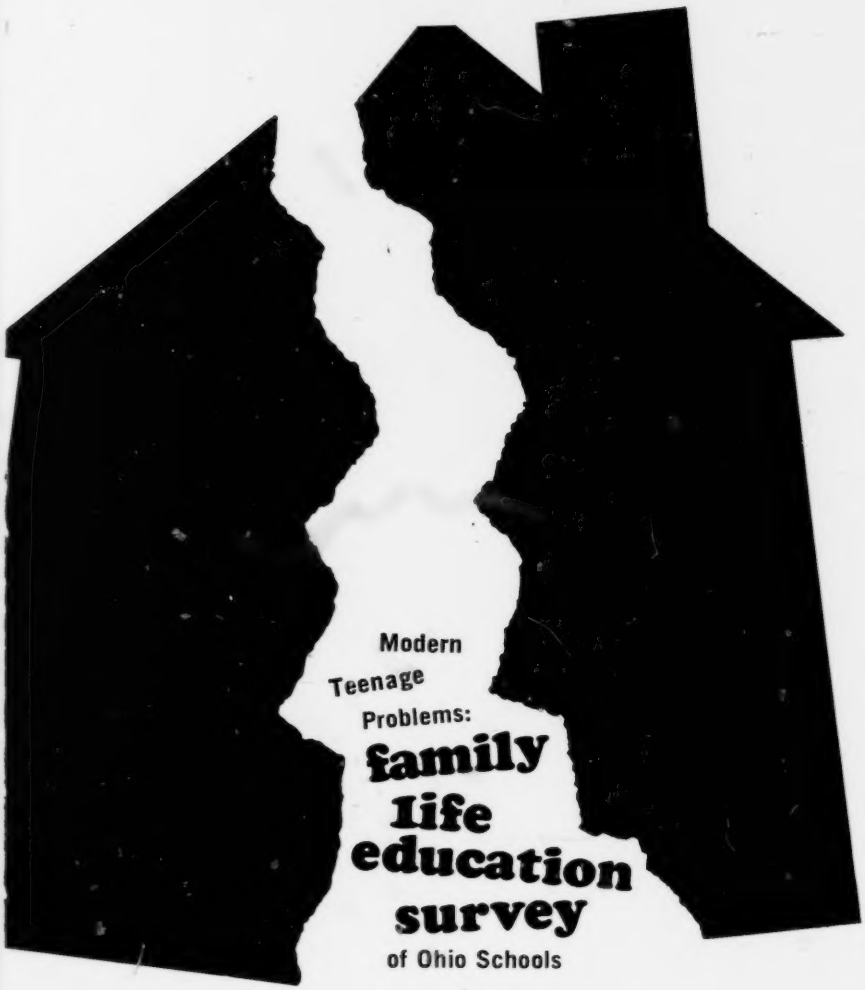

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MODERN TEENAGE PROBLEMS:

Report Of

FAMILY LIFE EDUCATION SURVEY

of

Ohio Schools

TM 003 161

Prepared by

FAMILY LIFE EDUCATION SURVEY STAFF

of the

EDUCATIONAL RESEARCH COUNCIL OF AMERICA,

Cleveland, Ohio

for the

OHIO DEPARTMENT OF EDUCATION

Columbus, Ohio

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Introduction

In the spring of 1968, the Ohio Department of Education requested the Educational Research Council of America to make a survey in Ohio of the family life education offerings especially as they relate to selected social problems of youth. The study was conducted as a part of a statewide educational need assessment effort under Title III of the Elementary and Secondary Education Act. Work on the family life education survey was begun June 1, 1968, and completed March 15, 1969.

Planning and conducting the survey were the work of many persons. The individuals who contributed to the preparation of the final report were:

Ralph H. Ojemann, Chapters I, II, and V

Ted F. Andrews, Chapter III

James Joseph Gallagher, David Hyde, Willard Korth,

Richard Morrell and Ralph H. Ojemann, Chapter IV

Appreciation is expressed to all who cooperated in the survey. Miss Florence Keck assumed the editorial responsibility for the entire report. Helpful advice in the organization and conduct of survey were supplied by many persons, including Mr. Rupert Beckstett, who served as coordinator; Dr. George Baird, President of Educational Research Council of America; Dr. Alden Blankenship, Assistant Director of Educational Research Council of America; and Mr. L. Romanos, Assistant Director of Educational Research Council of America. Appreciation is also expressed to Superintendent Martin Essex, Dr. Russell Working, Dr. Franklin B. Walter and Mr. Richard Dragin of the Ohio Department of Education.

Ralph H. Ojemann
Director, Family Life Education Survey

Chapter I

BACKGROUND AND PURPOSE

The 107th General Assembly of the State of Ohio in its regular 1967-68 session recognized that in the area of health and family living, the problems of (1) difficulties in sexual adjustment; (2) abuse of alcohol and tobacco; (3) drug abuse; and (4) use of violence, represent the foremost problems of youth today. It adopted House Resolution 78, which urged the inclusion of "health and family living education," with emphasis on these aspects "from kindergarten through high school."

There is mounting evidence that these problems are nationwide. In the spring of 1968, the National Congress of Parents and Teachers adopted a resolution which urged prompt consideration of an improved educational approach to the problem of alcohol and drug abuse. During the year 1968, the U. S. Naval Academy found it necessary to dismiss several students for misuse of drugs. In the same year, approximately 56,000 persons lost their lives in highway accidents in the U. S. and it is estimated that half of the accidents involved drunken drivers. The rise and spread of destructive violence among college and high school groups during 1968-69 caused much concern throughout the country. In a report at the Education Symposium on Social Issues.* sponsored by the Ohio Department of Education in May, 1968, Dr. Paul Popenoe, President of American Institute of Family Relations, called attention to the rising number of girls married legally at the age of 14 or under and the substantial increase in the divorce rate among these early

* *Education Symposium on Social Issues – Narcotics, Smoking, Sex, Alcohol*

marriages. Various state departments of health have reported increases in venereal disease rates among 12, 13, and 14-year-olds amounting to 100 percent to 200 percent.

In mid-1968, Dr. Martin W. Essex, Superintendent of the Ohio Department of Education, requested that the Educational Research Council of America (which has its offices in Cleveland) submit a proposal for conducting a study of the needs of Ohio schools as they relate to these social issues. It was hoped this would be the first step in developing curricular materials for the education of youth in these areas. A plan was submitted and the funds granted. The Family Life Education Survey (FLES) was launched in the summer of 1968.

Purpose of the Family Life Education Survey

The purpose of this project as indicated in the original grant application was to assess the needs of Ohio schools in the area of Family Life Education, including education in sexual behavior; the prevention of alcohol, drug and smoking abuse; and related social problems which appear to arise in considerable measure from inadequate family and school experiences.

The execution of the project was carried out in two phases. The purpose of the first phase was to develop the methods for assessing the needs of Ohio schools. This involved a definition of "need" and the development of procedures for carrying out the operations indicated by the definition. The purpose of the second phase was to gather the necessary data from a representative sample of Ohio schools and to analyze the results.

Chapter II
DEFINITION OF NEED AND DETERMINATION OF DEVELOPMENTS DESIRED

Definition of "Need"

The word "need" has two connotations. It may refer to (a) lack of something desired,* or (b) a lack of something required to stay alive.

The interest here is obviously not in an individual's merely subsisting; rather it is in having him acquire what is needed for an enriched life. Hence, the word "need" is used in the first of its two connotations.

When it is indicated that the project is concerned with determining needs and "need" is defined as the lack of something desired, it is necessary to specify what is "desired." What is the ideal or standard or optimum against which we will compare what the Ohio schools presently offer?

The setting of an ideal is a philosophical question. It will be necessary, therefore, to indicate the assumptions underlying the standard which is used in making the comparisons with which this project is concerned.

It is assumed that the ultimate goal of the school is the development of individuals who can continue living at their potential as long as their years will permit. We call this living *constructively*. Living constructively involves being able to meet the daily situations life presents and to work them out in ways that make it possible for the person to live at his potential and for others to do likewise. The individual can resolve the daily problems he meets without resorting

* This abstract statement may raise in the reader's mind the question, desired by whom? The answer to this question is provided by the context in which the word "need" is used in a given instance. For example, if A says he thinks a school needs "X" equipment, he is saying that he thinks it is desirable that schools have this equipment and that the school under consideration presently lacks it.

to deleterious conflict with family members, exploitation of the opposite sex, or turning to excessive use of drugs, alcohol, tobacco or violence. Living constructively also involves being able to go beyond the concern with conflict and frustration and developing enriched relations with the opposite sex as well as with family members, creative relationships with other human beings, and the intelligent use of such facilities as drugs represent.

The question now becomes: What have recent research, thinking and practice indicated as to what ideas, skills, attitudes and other developments are essential so the individual can live constructively in the areas of concern in this project and to what extent do the schools seek to develop these?

Determining the Developments Desired

One approach in determining what developments are essential for constructive living is to examine the findings of studies concerning how the various behavior patterns develop. Studies of the causes of abuse behavior also may provide suggestions as to what is needed to develop preventive measures. Studies of constructive behavior provide suggestions for further development.

There are a fair number of studies of conflict behavior in the family: exploitation of the opposite sex; and excessive use of drugs, alcohol, tobacco and violence. These investigations have thrown light on some of the factors that produce the abuse behavior and what is needed to initiate preventive measures. A few studies of what enriched living requires are also available. It was decided to examine both the studies of abuse behavior and the studies of factors involved in creative-constructive behavior.

The examination of studies concerning how various patterns develop represented one approach for determining what developments are essential for constructive living. It was considered highly probable that there are a number of etiological factors which are not yet known. It seemed helpful, therefore, that the examination of studies of behavior be supplemented with another approach; namely, the examination of what research, thinking, and practice have suggested as to optimal curricular experiences. In this method, the available research, thinking, and practice were examined to determine what school experiences have been suggested as probably helpful. An examination was made of the literature as it relates to each of four educational levels: primary, intermediate, junior high school and senior high school.

The foregoing considerations suggested that two approaches be

used to determine the developments essential for constructive living in the areas of concern in this project. They are:

1. The examination of the findings of studies as to how the various patterns of behavior, both constructive and destructive, develop. In this examination an attempt was made to note also the requirements for constructive living which the findings suggested.
2. The analysis of recent research, thinking and practice as exemplified in school programs as to suggested optimal curricular experiences.

The foregoing methods were concerned with developments in students considered essential for constructive living. In order to provide school experiences for *teaching* the concepts, attitudes, and skills, certain competencies and attitudes on the part of teachers and certain attitudes on the part of administrators and the community are essential.

Thus, in addition to specifying the developments desired in students, it was assumed that it was essential for the teacher to have a background of knowledge in each of the areas, constructive attitudes as they relate to behavior in each area, and constructive attitudes toward the teaching of each area. Constructive attitudes on the part of administrators are also essential. Similarly, constructive attitudes on the part of the community are required.

As will be indicated later, it was not possible to survey both knowledge and attitudes of the teachers and administrators, but selected attitudes were included in the study. The description of what were considered constructive attitudes will be supplied when the data with respect to the various attitudes are analyzed.

Certain indirect evidences as to community attitudes were obtained and these will be described in the analyses of results.

Detailed Procedures for Determining Developments Desired

For this phase of the project two task forces were organized. One had as its responsibility the location and preparation of summaries of studies of non-constructive and constructive behavior related to the four areas included in this project and the location of tests to probe for critical factors. The other task force had as its responsibility the examination of recent research, thinking and practice as to suggested optimal school experiences and the selection of the curricular offerings to be examined.

The "examination of studies and testing" task force consisted of six members. Each member was asked to prepare a digest of the

findings of recent studies in his area and then to indicate:

1. What aspects of the knowledge and attitudes of the student should be examined? What tests are available to probe for these competencies?
2. What attitudes and competencies will a classroom teacher need to teach these findings and what tests can be used to determine these attitudes and competencies in a given teacher?
3. What aspects of the readiness of administrators to take the necessary steps to include the desired educational experiences in the school offerings are significant?
4. What aspects of the readiness of the community are involved and what methods can be used to probe such readiness?

The members of the task force examining the suggestions for optimal school experiences and their responsibilities are detailed in Appendix I, Part B.

Since the areas of Health Education and Occupational Education (preparation of babysitters and preparation for marriage and parenthood) are involved, a task force for each area was set up, whose function it was to examine the research, thinking and practice with respect to suggestions for optimal programs in these areas and how school offerings can be examined.

When the preliminary findings of these task forces had been assembled, three nationally known consultants were invited to examine the work and make comments. These comments were incorporated into the final report.

Results of Analysis of Literature

From the analyses contained in these reports the items to be assessed were assembled. The results will be presented in terms of a General Overview and Developments Desired in Detail.

General Overview

The examination of studies indicated that the behavior patterns of concern in this project in the "abuse" form are very often attempts by the individual to solve daily frustrations. For example, the summary of the experimental and clinical analyses of "drug abuse" behavior concluded that among the causes which may lead young people to this behavior there may be any one or a combination of the following:

a. They may be rebelling and protesting in anger because they feel a threat to their independence or importance.
b. They may feel estranged from their elders and perhaps their peers and have a strong need to "belong."

c. They may feel a need to be insulated from the stimulations of what they perceive as "today's discordant society."
d. They may be rationalizing their behavior.
e. They may assume that the use of drugs will widen their range of experiences in some desirable way.
f. They may feel an absence of joy and zest and new experiences in their lives, which results in boredom.
g. They may be imitating the drug orientation of their associates.
h. They may be trying to escape from the realities of life.
i. They may be making a call for help with problems in general.
j. They may find a sense of achievement from getting and determining a way to pay for drugs.
k. They may find the use of drugs helps them in their loneliness to feel closer to others.

The findings of the studies of the various types of behavior suggest that the causes of the non-constructive patterns can be grouped into two major categories:

1. The individual suffers frustrations and he uses such behavior as an attempt to solve his difficulties, or,
2. He engaged in the behavior in the past through a combination of circumstances, has found the behavior satisfying and since he does not appreciate the more remote consequences, continues it.

One variation of method two appears when the individual is casting about for ways of working out some fundamental feeling. He hasn't met any special frustrations. He is growing and ready for new experiences. He may, for example, be engaged in working out his desire to become a significant person in his own right. He may attempt to satisfy this feeling in various ways, including experimenting with drugs or alcohol to determine whether he can gain new insights when under their influence. He may have heard or read that there is a possibility a given drug may have the effects he desires and he "takes a chance" or "runs a risk" to find out. In such cases, the educative task is that of helping the individual to become aware of the long-term effects and the "side" effects as well as the short-term consequences so that he is in a better position to balance the various effects.

It appears from the findings that although such forms of behavior as exploitation of the opposite sex, excessive use of drugs, alcohol and tobacco, or resort to violence in attempting to resolve socio-political differences may appear quite diverse behaviors on the surface, they

tend to have important elements in common. They are in large measure different ways of attempting to work out feelings, especially the frustrations or difficulties a person meets in building his life.

In making the above statement we have to recognize a distinction between (a) the feeling or personality demand the individual is attempting to satisfy, and (b) the methods he uses to satisfy it. In the case of sexual behavior in the human, for example, the development of the sexual structures and the sexual feelings are to a great extent genetically controlled. The sexual structures and feelings mature after birth. This is an aspect of biological maturation. The development of methods for satisfying these feelings, such as the use of marriage, promiscuity or exploitation of the opposite sex, however, is an aspect of social development. Hence, in considering the various forms of behavior we have to make a distinction between the development of the feelings or personality demands and the development of methods for satisfying these demands.

It may be helpful at this point to consider briefly the process of developing methods for working out personality demands. The process may be conceptualized as follows:

There are various demands an individual has to meet if he is to continue living and realize his potential. He has to obtain food, protection from the elements, protection from forces that produce physical or mental "harm"; deal with his sex feelings; and find challenging and satisfying use for his abilities.

In working out these tasks the individual devises or adopts a method, using whatever ideas, skills, attitudes or other resources he has available. He may have learned that there are some activities he can perform more skillfully than others. He may see someone using a method that looks good to him and he adopts it. He may learn of some methods through what he is told or what he reads. He gets his ideas from many sources. If he finds a given method helpful he will tend to continue it. Since he is a young person he will tend to give more emphasis to immediate effects and less to long-term consequences unless his experiences have been broadened through effective teaching to help him become aware of the more remote consequences.

Thus it may occur that the young person may see someone smoking. He finds that people consider this grown-up. He tries it, finds it satisfying and, since he does not appreciate the more remote consequences, continues it. As another example, the young person may have read or heard that there is a possibility a given drug may have the immediate effects he desires and he "takes the chance" to find out.

If he has not been taught the more remote consequences and the "side" effects, he will not realize the risk he is taking.

In the process of working out the tasks, things may not and usually do not go as smoothly as the above examples imply. The individual may meet some barriers. In attempting to develop a measure of self-respect, for example, the individual may have difficulty in achieving the respect of his classmates or peer group, or in feeling that he "amounts to something." People may think of him as being less capable than he is. He may feel he is being pushed around. He may not "see the use" in what he is studying at school. He may have trouble in doing respectable work in the classroom because of poor reading skills, or inadequate foundations in arithmetic. He may have some serious worries such as worries about being displaced by technology. He may not be respected at home. The barrier may have many sources.

When the person meets a barrier which he cannot easily overcome, he feels blocked or frustrated. This is an unpleasant feeling and he tries to get rid of it. Again, he uses whatever ideas, skills, attitudes and other resources he has available. He gets his ideas and attitudes from many sources.

If he finds he cannot remove the barrier, doesn't understand it, or hasn't been taught how to meet such difficulties, he may try such methods as:

(a) Yelling and hitting others
(b) Turning to exploitation of sex
(c) Stirring up a family conflict
(d) Turning to drugs, alcohol, chain-smoking.

Thus, as indicated earlier, the causes of "abuse" behavior can be grouped into two major categories:

a. The individual suffered frustrations that proved difficult for him to handle and he uses "abuse" behavior as an attempt to solve his difficulties, or

b. He engaged in the behavior in the past through a combination of circumstances, has found the behavior satisfying and since he does not appreciate the more remote consequences, continues it.

A special form of "b" that appears with varying frequency is found in those cases in which the family and community culture teach the child a non-constructive method for working out some task. For example, in some subcultures the child may be taught to defend himself by using a knife.

This analysis also indicates that although such forms of behavior as exploitation of the opposite sex, abuse of drugs, alcohol and tobacco, or the resort to violence in attempting to solve social differences may appear as quite diverse behaviors on the surface, they tend to have important elements in common. As indicated earlier, they are in large measure different ways of attempting to work out feelings, especially the frustrations or difficulties a person meets in daily living.

It is perhaps not difficult to appreciate the connection between frustration and the use of violence in protest behavior, and it is also not difficult to appreciate the connection between the search for personal significance and new experience in abuse of drugs. The use of certain forms of sex behavior, however, may also be an attempt to solve a daily problem. This statement may not be so clear since sex feelings are biologically determined and, on first thought, satisfying sex feelings may seem a natural outcome of biologically or genetically determined developments. However, as indicated above, it is important to make a distinction between the presence of the feelings and the method used to satisfy them. An individual may experience the desire to satisfy sex feelings, and he may use various methods for doing this (marriage, promiscuity, etc.). The feelings are one aspect; the method of satisfying them is another.

Also, the individual may at times feel the need for satisfying his sense of power along with satisfying sex feelings. He may have suffered some failure in his daily work; this may have generated a feeling of inadequacy and he is now faced with the problem of overcoming this feeling. He may attempt to do so by dominating or "conquering" or subjugating some member of the opposite sex. In the process he may satisfy both the sex feeling and the desire for "being a somebody" or a powerful individual. In the case of a male he may satisfy a sense of power and accomplishment by "making the girl pregnant." In the case of a female she may satisfy a sense of power or accomplishment by "leading him on."

Sex feelings can be satisfied in ways that involve domination or subjugation and similar methods or they can be satisfied in ways that are truly cooperative; that is, they respect the other person as an individual of dignity and worth, satisfying feelings of inadequacy, insecurity and the like. Thus, a very important common element underlying "abuse" behavior in the sexual area, as well as in other areas with which this project is concerned, is the extent to which the individual is learning to work out daily problems in ways that are develop-

mentally constructive as this term has been defined earlier in this report.

If the individual receives understanding guidance at home and at school in the process of working out these tasks, he will tend to develop constructive methods. On the other hand, if he receives little or no guidance and has to rely on his own resources, he will tend to use immature methods. If the child is provided with little or no guidance and is forced to use his own resources, we would expect a high proportion of immature behavior. Many of the guidelines which help shape the methods the mature adult uses in deciding what to do, such as an awareness and consideration of the remote consequences of acts, are built up through experience, either direct or vicarious. The child does not have these guidelines available. He has mainly his experiences, which tend to be heavily loaded with the immediate or short-range effects.

Thus, the foundation for preventing the development of "abuse" behavior and promoting the growth of constructive behavior requires that the child learn to understand the nature of the tasks life presents, the nature of frustrations, differences between constructive and non-constructive methods of resolving frustrations, including differences in their remote as well as immediate consequences; and that he acquire facility in the use of constructive methods for working out the daily tasks.

There is some evidence that with help from an understanding parent or teacher the child can learn something of the nature of frustrations, how they can be worked out constructively, and how to use this knowledge in making daily decisions. There is evidence that learning how to solve daily frustrations constructively can begin in the early years.*

We should ask these questions: Is the child making a beginning in learning how to meet and resolve the daily situations he meets in both individual and group activities? Is he learning how to handle fears and worries constructively? Is he learning the function of the teacher as a guide to help him learn and as a counselor to whom he can go when something worries or concerns him? Is he making a beginning

* For evidence as to the possibility and effect of teaching the elements of behavioral science at the elementary school level, see the review of studies in Ojemann, Ralph H. Significance of a Causal Orientation *Keeping Abreast of the Revolution in Education*: A Report of the Twenty-eighth Educational Conference, 1963, sponsored by the Educational Records Bureau; Rosenthal, S. A Fifth Grade Classroom Experiment in Fostering Mental Health. *Journal of Child Psychiatry*, 1952, 3, 302-329; and Slobetz, F., and Alice Lund. Some Effects of a Personal Development Program at the Fifth-Grade Level. *Journal of Educational Research*, 1956.

in learning the use of consultation with his teacher as a method when the situation becomes too difficult for him to handle? Is he receiving help in discriminating among different methods of solving daily problems as to their more remote consequences, and is he learning to recognize several different constructive ways of satisfying his feelings for security and "being a somebody"? Is he learning to become sensitive to the complex nature of behavior and differences in rates of growth and development?

From these beginnings in the early grades we would expect to move to the more complex aspects of learning to handle the daily situations constructively. As the pupil reaches the level where he can appreciate such methods as using marijuana and other drugs we would expect their use discussed as a method some people employ to solve situations they meet and the effects of such methods.

At the late elementary level and before adolescence, we would expect some learning about individual differences in sex development and sex feelings and how, in general, sex feelings can be used constructively and destructively.

We would also expect some education in thinking in probability terms, since this is an important aspect in understanding behavior. Two of the outstanding characteristics of behavior are its complexity as to possible multiple causes and the necessity of arranging possible causes in order of probability when dealing with given situations.

As the adolescent level approaches we would expect concern with the more complex questions of constructive relations of the individual to his physical and social environment, including his relations to the opposite sex, to his work and play, and to his own development and philosophy of life. This would also include learning to understand the behavior of adults, including their inconsistencies as well as their hopes and disappointments.

Developments Desired in Detail

The foregoing discussion provides an overview of the findings from the analysis of the literature. The "Developments Desired" as derived from the study of the literature are as follows:

a. THE KINDERGARTEN AND PRIMARY LEVEL — Is the pupil learning:

Developments Desired	How Assessed
1. That the teacher is basically a guide to assist him in his learning and that when he has a problem related to his learning which worries or bothers him and which	Conception of teacher items

he cannot handle, he should have the opportunity to consult with someone, for example, his teacher	
2. That he can take some responsibility of keeping the teacher informed of difficulties he cannot work out	Curricular experiences
3. That human behavior is complex and we cannot make snap judgments about it; it must be understood before it is judged	Causality test
4. That he and the other children have the task of meeting their feelings of need for security, adequacy, being "a somebody," and activity; and that the task, although difficult, can also be fun	Causality test
5. That there are several ways of being "a somebody" and their effects	Curricular experiences
6. That there are several ways of dealing with fear and worry and their effects	Curricular experiences
7. That when a person has trouble working out these feelings "it bothers him" and he has to find some way of resolving such frustrations	Curricular experiences
8. The beginnings of what is involved in working together	
(a) Purpose and effect of division of labor as in school, family, and related groups	Curricular experiences
(b) Constructive use of such devices as sharing, consideration of others, leading, and following	Curricular experiences
(c) Effect of reliability and unreliability in doing one's share in division of labor	Curricular experiences
(d) Effect of honesty and dishonesty in working with others in daily situations	Curricular experiences
(e) Purpose and use of simple rules	Curricular experiences
9. Different ways of resolving simple differences and their effects—the beginnings of how to decide what is right and wrong	Curricular experiences

10.	That people grow in different ways and at different rates (physically, intellectually, emotionally, socially)	Test of human growth and development
11.	That each part of the body is an important part of the whole and there is nothing shameful about any part of it	Test of human growth and development
12.	That all living things grow and reproduce and that growth and death are characteristic of all living things	Test of human growth and development

b. THE INTERMEDIATE LEVEL — Is the student learning:

	Developments Desired	How Assessed
1.	Why people act as they do—elements of behavioral science	Causality test
2.	Physiological growth and change (includes sex anatomy, nature of fertilization, and so on)	Sections from Health and Sexual Knowledge and Attitude Test
3.	Ways of meeting "major" needs	
	(a) Different ways of developing a feeling of personal worth and their effects	Curricular experiences
	(b) Different ways of handling aggressive and angry feelings and their effects	Aggression items from Morrell's test
	(c) Different ways of handling fears and the effects of these ways	
4.	How the teacher and pupil work together (includes beginning of pupil responsibility for his own development beyond what was started at the primary grades)	Curricular experiences
5.	Responsibilities and "rights" of members of small groups (family, schoolroom committees, etc.)	Curricular experiences
6.	The beginnings of what marijuana, tobacco and alcohol are, why people use them, what the effects are and how the problems young people are trying to work out through their abuse can be solved in other ways	Test on the Use of Drugs, Alcohol, Tobacco
7.	Learning how to decide	

(a) Different ways of resolving conflicts with others (includes differences with the opposite sex, as well as differences among adults and peers)	Curricular experiences
(b) Different ways of making decisions, beginning to consider alternatives and probable consequences	Curricular experiences
8. Deciding what is right and wrong—elementary philosophy of life	Curricular experiences

c. THE JUNIOR HIGH SCHOOL LEVEL—Is the student learning:

Developments Desired	How Assessed
1. More about why people act as they do, including especially the nature of frustration and various methods people use to resolve them	Elementary psychology items
2. Development of sex feelings, sex-role identities and genital-sex object preferences; effects of different ways of handling sex feelings, including the "human person" way, the motivations that may underlie each and the effects of each (includes such methods as promiscuity, pre-marital intercourse, marriage, and the "human person" way and their effects)	Sex Attitude and Knowledge Test Curricular experiences
3. More about the constructive and non-constructive use of alcohol, tobacco, drugs; the effects of the various uses; problems people are trying to solve through the non-constructive use of these substances, and how the problems they are trying to solve through their use can be worked out more constructively	Test of Attitude and Knowledge
4. How to achieve a feeling of significance and personal worth, including different methods young people use and their effects	Curricular experiences

5. The nature of authority, the role of authority and rules in human development, the reasons for inconsistencies in authority and rules in the adult world, learning to decide what constructive interactions with authority are and how to develop such interactions	Curricular experiences
6. Learning to think in probability terms and the application of this way of thinking to everyday situations	Test of Probability
7. More about learning to decide—different ways of making decisions, including different ways of resolving conflicts with others, the probable effects of each (including effects as they relate to the basic goals he wishes to achieve)	Curricular experiences
8. Methods for finding out what is right and wrong—building one's philosophy of life (including beginning considerations of the purpose of life, what basic goals to work toward)	Curricular experiences
9. Purpose of dating, different types of mutually constructive and non-constructive dating behavior, motivations underlying such behavior	Curricular experiences
10. How to take care of children (especially for those who are doing such work for pay)	Curricular experiences

d. Senior High School Level — Is the student learning:

Developments Desired	How Assessed
1. More about different ways of satisfying sex feelings, including the "human person" way and the effects of each. This includes:	Test of Sex Knowledge and Behavior
(a) More about the "learned" nature of sex-role identities and genital-sex object preferences	Curricular experiences
(b) Awareness of different motivations that may underlie intercourse and related sex behavior	

	(c) Effects of sex behavior arising from different motivations	
	(d) Appreciation of the "human person" way of satisfying sex feelings, the role of marriage and alternatives to marriage	
2.	More advanced aspects of the effects of tobacco, alcohol and drugs, different uses of these substances and their effects, motivations that underlie various uses and how the motivations underlying non-constructive uses may be worked out constructively	Test of Uses of Alcohol, Tobacco, Drugs
3.	A comparison of common "teenage" and mature ways of meeting major human "needs," especially different ways of handling hostile, aggressive feelings and their consequences	Curricular experiences
4.	Applying the elements of thinking in probability terms to complex personal, family and social problems, thus adding to the understanding of the complexity of human behavior	Test of Probability
5.	The advanced aspects of the process of decision-making—this includes learning to use a consideration of alternatives and probable consequences in making decisions in complex personal and family situations, including decision-making under emotional stress	Curricular experiences
6.	Understanding and planning ways of taking a constructive approach to inconsistencies in adult society	Curricular experiences
7.	Building a philosophy of life that is actively used in deciding what to do in daily situations—includes practice in the process of defining and setting goals and using long-range basic goals in crucial decisions and in crises situations	Curricular experiences
8.	How to build a satisfying marriage (includes factors associated with happy and	Test of Knowledge of Marriage

unhappy marriages, responsibilities of each partner in a happy marriage, available resources for assistance in building a happy marriage)	Curricular experiences
9. Preparations for parenthood (a) Role of parenthood in society (b) Needs of husband and wife (c) Needs of children—what the human personality requires for its growth and the role of family experiences in meeting those needs (d) Division of responsibility between family, school and related agencies.	Test of Knowledge of Child Development Curricular experiences

Chapter III
METHOD OF ASSESSMENT

General Plan

The master plan included schemes for assessing knowledge and attitudes of a random sample of elementary (beginning 7th graders) and secondary students (beginning 12th graders) concerning: (1) human growth and development, (2) behavioral science, (3) sex, (4) drugs, (5) alcohol and tobacco, (6) aggressive behavior, (7) relations to family authority, and (8) elementary philosophy, including probability conception of knowledge.

An important goal of the survey was to ascertain the influence of the learning experiences on knowledge and attitudes of children during elementary school (grades K-6). Since the survey was conducted in the fall, it was decided that the beginning 7th graders would be the logical population to assess. Also, the logistics were simplified by conducting the survey primarily in junior high and middle school buildings. Beginning 12th graders were assessed in order to obtain a population of students who were as near to completion of secondary school as was feasible at the time the survey was conducted.

In addition, plans were formulated to survey the knowledge and attitudes of teachers as related to the above-mentioned areas in which the students were tested; and a method of assessing the principal's understanding of child behavior was developed. Randomly selected students in schools in the following categories were tested: central city, urban fringe, autonomous cities, and rural towns and counties. Ele-

mentary and secondary curriculum coordinators were interviewed to ascertain what curriculum materials in family life education were in current use.

Sampling Procedure

A great deal of time and effort was devoted to developing a plan to sample school systems. Several persons who are authorities with a great deal of experience in conducting surveys consulted with the research staff. Some of the parameters that were considered in the evolution of the sampling design are demography, economy, geography, population density and school district organization and size. Data from the Bureau of Census[1] were utilized extensively.

School systems were selected from two categories noted as standard metropolitan statistical areas by the Bureau of Census: central city and urban fringe. Of the 16 SMSA major cities, eight were randomly selected. A random selection of 15 central city high schools reduced the number of large cities to five: Cleveland, Dayton, Canton, Springfield and Columbus. No schools were selected from three of the eight major cities.

From the 126 schools that enrolled 7th graders within these five central cities, 23 schools were selected at random: four in Cleveland, six in Canton, five in Columbus, seven in Dayton, and one in Springfield.

Twenty school districts were selected from the 246 urban fringe category: Indian Hill, Chagrin Falls, Newton Falls, North Canton, North College Hill, East Cleveland, Lakewood, Martins Ferry, Wellington, Avon Lake, Lakeview, Hudson, Mifflin, Beavercreek, Midview, Elida, Northmont, Madison, Oak Hills and Symmes Valley.

From a list of 41 cities not listed as autonomous cities in the SMSA, 12 cities with a population of more than 10,000 were selected at random: Coshocton, Cambridge, Bowling Green, Norwalk, Urbana, Findlay, New Philadelphia, Ashland, Fremont, Lancaster, Mansfield and Delaware.

From a list of 69 counties not included in the SMSA category of rural towns and counties, 12 counties were randomly selected. There were 60 high schools within these 12 counties, from which 20 were randomly selected. Schools in cities of more than 10,000 were excluded. The counties were Adams, Brown, Delaware, Gallia, Harrison, Huron, Knox, Morgan, Paulding and Tuscarawas. Five of the schools were in the category of exempted village districts.

[1] Bureau of Census. 1961. U. S. Census of Ohio: 1960—General Population Characteristics. U. S. Department of Commerce, Bureau of Census, Washington, D. C.

Student Population Sample

A grand total of 11,590 students were tested — 6,283 elementary students (beginning 7th graders) and 5,307 secondary students (beginning 12th graders).

Within the schools in central city and urban fringe, approximately 50 percent of the 7th graders and 12th graders were tested during the first three class periods on an assigned test date. It was anticipated that this procedure would tend to yield a random sample, since a large number of classrooms and students were involved.

In the schools in autonomous cities category, all seniors and all 7th graders enrolled in the first two class periods were tested on the assigned test date.

In the districts in the rural town and counties categories, all 7th graders and seniors were tested on an assigned date.

Population Sample of Teachers

Within the randomly selected school systems, a Teacher Survey Questionnaire was administered to approximately 25 percent of the teachers in the school buildings in which students were tested. The sample of teachers was selected at random. In some large school systems, students were not tested in all buildings due to random sampling. In those school buildings in which students were not tested, certain buildings were selected and the Teacher Survey Questionnaire was administered to all teachers in them.

Population Sample of Principals

A survey questionnaire was administered to each principal of an elementary or a secondary school in which students were tested and in each elementary school where only the teachers were surveyed. There were 128 respondents.

Curriculum Coordinator Sample

Fifty elementary and secondary curriculum coordinators in districts in which students were tested were interviewed by a field representative from the ERC.

Development of Instruments

As an outgrowth of the review of the literature, statements of "developments desired" at the kindergarten-primary level, the intermediate level, the junior high school level and the senior high school level were listed. The "developments desired" were concerned with: (1) human growth and development, (2) behavioral science, (3) sex, (4) drugs, (5) alcohol and tobacco, (6) aggressive behavior, (7) relations to family authority, and (8) elementary philosophy including probability conception of knowledge.

Existing tests, survey instruments, questionnaires and the like for assessing the development of students with respect to these areas were reviewed by the research staff. Components of some of the extant instruments were borrowed and others adapted for use in the FLES instruments. The majority of the instruments used in the survey were developed by the research staff of the ERC. Student, teacher and principal survey instruments were coded and titled.

Elementary Student Survey Instruments

Five survey instruments were constructed to gather data on elementary students (beginning 7th graders):

Test EA — Knowledge and Attitudes Related to Drugs and Aggressive Behavior

*Test EB — Knowledge and Attitudes Related to Sex

Test EC — Knowledge and Attitudes Related to Understanding Behavior

Test ED — Knowledge and Attitudes Related to Human Growth and Development, Probability and Conception of the Teacher

Test EE — Knowledge and Attitudes Related to Use of Alcohol and Tobacco

Secondary Student Survey Instruments

Five survey instruments were constructed to gather data on secondary students (beginning 12th graders):

Test SA — Knowledge and Attitudes Related to Drugs

*Test SB — Knowledge and Attitudes Related to Sex and Marriage

Test SC — Knowledge and Attitudes Related to Understanding Behavior and Probability

Test SD — Knowledge and Attitudes Related to Human Growth and Development and Aggressive Behavior

Test SE — Knowledge and Attitudes Related to Use of Alcohol and Tobacco

Teacher Survey Instruments

Three survey questionnaires were developed to gather data on teachers:

TA — Knowledge and Attitudes Related to Aggressive Behavior, Use of Alcohol and Tobacco, Sex, Drugs and Conception of the Teacher Role

TB — Attitudes Related to Drugs, Sex and Teaching Family Life Education

TC — Understanding of Child Behavior

* Tests were not used in the survey.

Survey Instruments for Principals

The survey questionnaire, TC—Understanding of Child Behavior, which was administered to teachers, was also administered to principals.

Survey Instruments for Curriculum Coordinators

An Interview Schedule for Curriculum Coordinators, consisting of approximately 30 questions designed to gather information concerning curricular materials available for use in instruction in the various areas of concern in the FLES, was used by field representatives as an interview instrument.

Data Gathering Procedures

As soon as the school districts were selected to participate in the Family Life Education Survey, Dr. Martin Essex, in cooperation with the Educational Research Council of America, invited the superintendents to one of two orientation meetings. The first meeting was held in Columbus in early October with Dr. Franklin B. Walter representing the Ohio Department of Education and several members of the research staff representing the ERC. The second meeting was held in Cleveland a few days later.

These meetings provided an opportunity for the administrative officers of the school districts, the research staff of the ERC and the representatives of the state department to discuss the need for and objectives of FLES. Data gathering procedures were considered in detail. November 6th was designated as the date on which the student tests would be administered. A few schools had to opt for an alternate date.

An outline of gathering procedures was distributed and discussed. The procedures called for the appointing of a district coordinator, a building coordinator and test proctors. The responsibilities of each were clearly delineated and discussed in detail. The district coordinator became the liaison person between the district and the ERC field representative. Each building coordinator supervised the student testing in his building. The test proctors, who had received detailed printed instructions, supervised the testing of students in their classes. Tests were mailed. All testing was anonymous.

Four different tests were given in each elementary (beginning 7th grade) and secondary (beginning 12th grade) classroom selected to participate in the survey. Based on data previously gathered by the ERC field representative, the ERC packaged the tests and answer sheets and mailed them to the building coordinators. The answer sheets and tests were coded red for the 7th grade and green for the 12th.

The answer sheets and survey instruments for teachers and principals were color coded blue and black respectively. The building coordinator distributed the instruments along with detailed instructions to the test proctors, who administered the instruments. Strict anonymity was maintained.

The building coordinator retrieved all answer sheets, tests from the test proctors and other survey instruments from his building and mailed them to the ERC.

Approximately 30 ERC field representatives, organized into six teams, gathered the data for FLES. They interviewed the curriculum coordinators and other administrative officials in each district involved in the survey. Each ERC field representative completed the Interview Schedule for Curriculum Coordinators and submitted a written report of his interview with other administrative officials in the district.

Each one of the approximately 20,000 answer sheets was individually scrutinized for erratic and unusual markings and prepared so that the data processing equipment would not reject them.

LIMITATIONS OF DATA GATHERING

As was mentioned earlier, administrative officers of the school districts selected to participate in the survey were convened in early October. The need, research design, survey instruments and scope of the survey were discussed. A sample set of survey instruments was given to each district representative so that he could review the survey with school officials in his district prior to the assigned testing date, November 6th. As a result of these reviews, it was decided to withdraw the following instruments from the battery of survey instruments:

EB — Knowledge and Attitudes Related to Sex

SB — Knowledge and Attitudes Related to Sex and Marriage

Therefore, data that could have been gathered by these instruments were not obtained. All selected school districts did not fully participate in the survey. School districts that did not participate in any part of the survey were Columbus, Hudson and Western Reserve Local.

Methods for Processing Data

The student test answer sheets were scanned by a Digitek 100 (Opscan) and the responses to each question recorded on magnetic tape, which was used as input to the Honeywell 200 computer. The following computer programs were written to generate desired printed reports:

(a) Reformat Digitek tape into meaningful sequential arrangement

(b) Generate item analyses tapes, by parts

(c) Print item analysis reports (standard frequency)
(d) Generate special item analysis tapes
(e) Generate scoring analysis tapes
(f) Print scoring analysis reports
(g) Generate "mean/standard deviation by concept" tapes
(h) Print "mean/standard deviation by concept" reports

The reports were printed by the Honeywell 200 computer, using the magnetic tapes from the Digitek 100 as the source document.

A "master tape," which contains all records as read by the Digitek, was prepared. This tape will be used for subsequent studies that may be undertaken.

Each of the computer programs has built into it "selective capabilities," making it possible to select different criteria for use in future studies.

The survey instrument "TC—Understanding of Child Behavior" was administered to both teachers and principals, who entered their responses directly on the survey instrument. The responses were read by two members of the research staff and rated either yes, no or doubtful in terms of their responses to the following questions:

(a) Is he thinking in terms of multiple causes?
(b) Does he recognize the role of his own behavior in the etiology of students' behavior disturbances?
(c) Does he recognize the possibility of helping the student take some responsibility for his own development?

The research staff entered their interpretations of the teachers' and principals' responses on answer sheets so they could be scanned by the Digitek 100. These answer sheets were then fed into the same computer programs as were the student test answer sheets.

Data were retrieved from the Interview Schedule for Curriculum Coordinators by the research staff of ERC. Many of the responses could be tabulated and quantified; others were subject to interpretation. The subjective responses were analyzed and interpreted by a member of the research staff and grouped into categories of related responses.

The number of students, teachers and principals involved in the survey are given in Table I.

TABLE I
Students, Teachers, Principals — Respondents By Sex and School Category

	Central City		Urban Fringe		Autonomous Cities		Rural Towns & Counties		Total
	M	F	M	F	M	F	M	F	
Elementary Students	624	583	959	922	753	777	848	817	6283
Secondary Students	833	901	689	750	480	491	556	607	5307
Elementary Teachers	38	42	60	62	70	74	39	25	410
Secondary Teachers	87	68	91	60	104	51	55	24	550
Total Principals	15	4	34	4	32	3	29	7	128

M = Male
F = Female

Chapter IV
ANALYSES OF DATA

A. Pupil Test and Coordinator Interview Data

1a. Behavioral Science — Causal Understandng of Behavior at the Elementary Level

To examine the extent to which a causal understanding of behavior is developed at the elementary level, a test was administered to beginning 7th grade pupils, and six questions relative to curricular offerings were included in the interview with the elementary curriculum coordinators. The test consisted of 43 statements, to each of which the pupil responded by indicating agree, disagree or uncertain. A simple situation involving some form of human behavior was presented. This was followed by several statements to which the student responded. The following is an example:

> Alice often took toys away from Jerry, her little brother. No matter what toy Jerry was playing with Alice would take it for herself. Then Jerry would usually cry and their mother would make Alice give the toy back to Jerry.

37. It is easy to see that Alice is the kind of girl who will not learn to play fair.
38. There could be many things which Alice does not know about which made her act this way.
39. It would be wise if Alice's mother punished her to teach her a lesson instead of listening to Alice's excuses.

Statement number 37 is in the form of a judgment without sufficient data. Statement number 38 reveals a sensitivity to the complexity

of behavior. Statement number 39 overlooks the complexity o behavior.

There were 10 situations which represented a total of 43 state ments. Some of the statements recognized the dynamic nature an multiple causation of behavior; others did not. This test has a Kuder Richardson (K-R 20) reliability of .78.

The total mean score of the 43-statement test was 17.68 with a standard deviation of 6.40. The mean was approximately 40 percen of the total possible score. Approximately 68 percent answere between 11 and 23 of the 43 questions correctly; only about 16 percen answered more than 23 questions correctly.

Analysis of variance indicates that there are no significant differ ences resulting from the sex or type-of-school variables.

Since the statements required only a general understanding o the multiple causative nature of behavior, we might expect a mea score much higher than 40 percent of the possible score. It thu appears that this concept is not well developed at the completion o the elementary school.

A few slightly more advanced aspects of behavioral science no included in the test were included in the interview with the curriculu coordinators to determine to what extent instruction of these aspect was offered. An examination of the data indicates that on the whol the proportion of schools offering instruction in these topics is quit low. When the total of all schools is considered, the percentage range from 10-24 percent.

A general conclusion which seems warranted by the data is tha few Ohio schools offer their elementary students instruction in som very important aspects of elementary behavioral science.

1b. Behavioral Science — Secondary Level

The examination of the situation with respect to a causal orienta- tion to behavior and related aspects of behavioral science at the secondary level was made by administering a test to seniors in high school and by interviewing the secondary curriculum coordinators as to the curricular offerings in specified areas. The test consisted of 29 statements to which the students responded by indicating agree disagree or uncertain for each statement.

The Kuder-Richardson "20" reliability of this test is .85. The mean of the total group was 14.58, which is approximately 50 percent of the total possible score of 29. This is some improvement over the

results at the elementary level on similar statements. At the elementary level the overall mean was 40 percent of the total possible score. But a score of 50 percent on a test of this type is still much below the level representing a functional awareness of the multiple causative complexity of behavior. The situations were relatively simple, everyday situations and a sensitivity to their complexity would be needed in dealing logically with them. The analysis of variance of the scores on this first section yielded significant differences both between the sexes and among the schools (F's of 20.20 and 18.68 respectively, both of which are beyond the .001 level of significance). Girls tended to score significantly higher than boys and the central city system scored lower than other types of school systems.

An inspection of the data concerning the results of interviews with curriculum coordinators indicates that when the total number of school systems is considered, the percents of systems offering systematic instruction in various topics run from 14-22 percent. The percents for individual types of systems vary somewhat more (from 5-40 percent) but the overall picture is one of relatively few offerings.

The situation at the secondary level is thus very similar to that at the elementary level. Relatively little emphasis is given to the teaching in this area.

2a. Human Growth and Development — Elementary Level

The examination of whether elementary pupils are learning the basic aspects of human growth and development was made by administering a test to pupils who had completed the sixth grade (beginning seventh graders) and by interviewing the elementary curriculum coordinator as to specific curricular offerings in this area. The test consisted of 18 multiple choice statements dealing with various aspects of physical, mental and emotional growth and development.

The Kuder-Richardson "20" reliability of this test is .48. The mean for the total group was 6.56, which is about 35 percent of the total possible score of 18. This overall mean score is much below a level which would indicate a functional understanding of the physical and other changes which are a part of human growth and development. The statements dealt with some of the changes occurring during childhood and adolescence.

Girls had higher mean scores than the boys for all types of school systems. An analysis of variance of the scores indicated that this

difference was quite significant (beyond the .001 level of significance for an F of 71.12). The analysis of variance also showed a significant difference among types of school systems (F of 4.26 significant at the .01 level of confidence).

A summary of the results of the interviews with the elementary curriculum coordinators is given in Table II. The first column in Table II shows the curricular topic while the remaining columns indicate the percent and number of school systems and the total offering instruction in the particular topic in a systematic fashion. Curricular offerings were classified as systematic if they were part of a planned program and supporting data were available.

Inspection of the data in Table II indicates that for total number of school systems the percents range from 28 to 50 percent. The percents for individual types of systems vary even more, ranging from 11.8 to 63.2 percent. There is considerably more emphasis given to these curricular topics by urban fringe systems than by rural town and county systems. Overall, however, not as much emphasis is given to these very important curricular topics of physical growth and development as might be desired.

TABLE II

Percentages of School Districts Offering Systematic Instruction About Human Growth and Development at the Elementary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM									
	Central City (4 systems)		Urban Fringe (19 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)		TOTAL (50 systems)	
	%	No.	%	No.	%	No.	%	No.	%	No.
B 1. Is any instruction given girls about their physical development other than menstruation?	50	2	63.2	12	50	5	35.29	6	50	25
B 2. Does instruction include attitudes toward different rates of growth and development among individuals?	25	1	42.1	8	40	4	11.8	2	30	15
C 1. Is any instruction given boys about their physical development?	50	2	63.2	12	50	5	23.5	4	46	23
C 2. Does instruction include attitudes toward different rates of growth and development among individuals?	25	1	31.6	6	50	5	11.8	2	28	14

2b. Human Growth and Development — Secondary Level

An examination with regard to whether secondary pupils are learning advanced aspects of human growth and development was

made by administering a test to high school seniors and by interviewing the secondary curriculum coordinator concerning specific curricular offerings related to this topic. The test contained 15 multiple choice statements which dealt with various aspects of physical, mental and emotional growth and development.

The Kuder-Richardson "20" reliability for this test is .41. Apparently for the extent of the area covered the test was much too short to obtain the reliability desired but available testing time did not permit a longer test.

The mean for all students was 7.79, which is slightly more than 50 percent out of a total possible score of 15. This is some improvement over the results at the elementary level on comparable statements. At the elementary level the overall mean was approximately 35 percent of the total possible score. But the overall mean score on this test still falls below a level indicative of an adequate knowledge of the physical and other changes which are inherent in human growth and development. Inasmuch as the statements dealt with changes occurring during childhood and adolescence, it might be expected that seniors would be able to handle them with relative ease.

Girls consistently obtained higher mean scores than boys in all types of school systems. This difference between male and female mean scores is largest for autonomous cities and rural towns and counties. An analysis of variance of the scores showed that this difference between the sexes was quite significant (F of 93.70 significant beyond the .001 level of confidence ($F = 10.83$)). This analysis of variance also indicated that there was a significant difference among the types of school systems (.01 level of significance with an F of 3.87).

A summary of the results of the interviews with the secondary curriculum coordinators relative to this topic of human growth and development is presented in Table III.

In Table III the first column contains the curricular topic and the remaining columns show the percent and number of school systems, plus the total offering instruction in a systematic fashion for that particular topic. Curricular offerings were classified as systematic only if they were part of a planned program and supporting data were available.

An inspection of the data in Table III indicates that the percents range from 52 to 68 when the total number of school systems is con-

sidered. The percents vary somewhat more for the individual types of systems, ranging from 35.29 to 80.

The situation at the secondary level is somewhat better than at the elementary level, since we find that there are more planned systematic curricular offerings dealing with the topic of human growth and development. However, it appears that 25 percent of central city systems and over 50 percent of rural town and county systems do not presently have planned offerings in this curricular area.

TABLE III

Percentages of School Districts Offering Systematic Instruction About Human Growth and Development at the Secondary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM								TOTAL (50 systems)	
	Central City (4 systems)		Urban Fringe (19 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)			
	%	No.	%	No.	%	No.	%	No.	%	No.
B 1. Is any instruction given girls about their physical development other than menstruation?	75	3	78.94	15	80	8	47.05	8	68	34
B 2. Does instruction include attitudes toward different rates of growth and development among individuals?	50	2	78.94	15	70	7	35.29	6	60	30
C 1. Is any instruction given boys about their physical development?	75	3	68.42	13	80	8	35.29	6	60	30
C 2. Does instruction include attitudes toward different rates of growth and development among individuals?	50	2	63.15	12	60	6	35.29	6	52	26

3a. Attitudes Toward Sex — Secondary Level

To determine the attitudes toward sex at the secondary level, a test of attitudinal items was adapted from Schofield's study *The Sexual Behavior of Young People.*

The percentage of high school seniors who responded to each of the alternatives (agree, disagree, uncertain) are presented for each item according to (a) student's sex and (b) type of community. The Chi-square test was used to determine significance of differences for each of these parameters.

Teenage Morality

Teenage morality is referred to in Statements 3, 4, 6, 32, and 33. The statements were as follows:

Statement 3: It always pays to be honest.

Statement 4: Each person should decide for himself what is right and wrong.

Statement 6: If a boy gets a girl pregnant he should be willing to marry her.

Statement 32: Too much freedom in the early teens leads to trouble when you get older.

Statement 33: All homosexuals should be severely punished.

On Statement 6, "If a boy gets a girl pregnant he should be willing to marry her," a majority of the students agreed. However, it is significant that more than 40 percent did not agree with this statement.

There were significant differences in the responses between boys and girls on all items in this category except Number 6. A greater percentage of the girls than boys (78 - 66 percent) indicated "It always pays to be honest." Significant differences were registered by students from different types of communities regarding the necessity of honesty.

Nearly two-thirds of the boys and three-quarters of the girls felt that "Each person should decide for himself what is right or wrong" (Statement 4). No significant differences were found among types of communities. A comparatively small percentage (7 percent) were uncertain about this item.

On Statement 32, 10 percent more girls than boys (69 - 59 percent) agreed that "Too much freedom in the early teens leads to trouble when you get older." It is interesting to note that the highest percentage of agreement occurred in autonomous cities and the least agreement among the urban fringe group.

While a majority (65 percent) of the students indicated they do not think that "All homosexuals should be severely punished," 25 percent of the boys agreed with this statement and another 21 percent of them were uncertain about how they felt about this statement.

The findings here indicate that the teen ethic of today places great emphasis on individuals deciding for themselves issues of right and wrong. Authority of church, family, and other cultural institutions is being questioned. This strongly suggests that boys and girls need instruction in establishing criteria for moral decision-making.

Boy-Girl Social Relations

Statements 34, 35 and 36 examined attitudes toward boy-girl social relations. The statements were as follows:

Statement 34: Boys and girls should not kiss on the first date.

Statement 35: It is all right for a girl to invite a boy to her home when no one is there.

Statement 36: At our age, boys and girls should not be going steady.

More than three-fourths of the students disagreed with Statement 36. Apparently, at senior high age, going steady meets with their approval. All community areas had similar feelings about this item.

There is considerable agreement among boys and girls on "first date kissing" (Statement 34). The majority (76 percent of the boys and 69 percent of the girls) approved of first date kissing. It is significant to note that nearly the same proportion of seniors were uncertain about first date kissing as were opposed to it.

For a girl to invite a boy to her home when no one is there (Statement 35) is acceptable to a majority of the boys (61 percent) and to 38 percent of the girls. It is significant to note that 20 percent of the girls were uncertain about how this should be handled. Slightly less than half (48 percent) of all the students disagreed with this statement.

Sex information and education are referred to in Statements 7, 17, 20, 24, 27 and 29. The statements were as follows:

Statement 7: There is no need to teach about sex in schools because you can find out all you need to know for yourself.

Statement 17: It is important for a person who gives sex education to have had some firsthand experience with sex.

Statement 20: Teenagers have sex thrown at them all the time from advertisements, films and TV.

Statement 24: My teacher is able to talk about sex intelligently and without getting embarrassed.

Statement 27: I learn more about sex from friends of my own age than I learn from my parents.

Statement 29: Young people should be taught all about birth control.

On Statements 20 and 24, there is little difference in the responses of boys and girls. Nearly half of the students agreed that their "Teacher is able to talk sex intelligently without getting embarrassed" (Statement 24); but it is significant to note that 22 percent disagreed with this, and another 30 percent were uncertain that their teacher could discuss sex intelligently without being embarrassed. Over four-fifths of the students agreed that "teenagers have sex thrown at them all the time" by mass communication media (Statement 20). There is fairly close agreement in all communities on these two statements.

On Statement 7, 17, 27 and 29, there was considerable disagreement between boys and girls. For example, on Statement 7, a large majority (87 percent) of the students disagreed with the statement "There is no need to teach about sex in schools because you can find out all you need to know for yourself." Girls, however, expressed disagreement with this statement more than boys in the ratio of 94: 78.

On Statement 7, 17, 27 and 29, there was considerable disagreewith this statement. The boys especially (71 percent) thought this was important.

On Statement 27, it appears that a large majority of the boys (80 percent) and girls (72 percent) "learn more about sex from friends of their own age than from their parents." Students from rural areas and suburbs agreed with this statement more frequently than students from other communities.

A large majority (71 percent) of the seniors surveyed agreed that "Young people should be taught all about birth control." It is significant that less than two percent of the boys were uncertain about this, while 84 percent of them agreed that they should be taught about birth control. Students from all community types responded similarly to this statement.

SEXUAL ACTIVITY*

Statements 10, 14, 15 and 23 examined attitudes toward sexual activity. The statements were as follows:

Statement 10: Girls should remain virgins until they marry.

Statement 14: When it comes to sex, there is one standard for men and another for women.

Statement 15: If a girl has sex before marriage she gets a bad reputation.

Statement 23: People should not have sex relations until they are married.

On Statements 10, 15 and 23, there were considerable differences in the responses of boys and girls. The responses to Statement 10, which deals with whether "Girls should remain virgins until they marry," indicate that slightly over half (54 percent) of the boys agreed with this, while 75 percent of the girls placed importance on this. It is significant that more than one-third (35 percent) of all the students surveyed either disagreed with this statement or were uncertain.

* The analysis and categorization of statements was done by a two-man panel from the FLES staff. Statements were grouped only for convenience of discussion and not for statistical analysis.

A large percentage of the boys (40 percent) and girls (57 percent) agreed that "If a girl has sex before marriage, she gets a bad reputation." Nearly 60 percent of the boys and over 42 percent of the girls either did not agree that sex relations for girls before marriage gave them a bad reputation or else they were uncertain of the effect.

Statement 23 indicated that 67 percent of the boys either approve of or are uncertain about premarital sex relations, while 35 percent of the girls approve or are uncertain. When all students are considered as a whole, about 50 percent of them agree that "People should not have sex relations until they are married."

Statement 14 explores the existence of a double standard for men and women. Nearly two out of five students (39 percent) agreed with this. While the central city agreed with this more than any of the others, the difference in responses does not seem to be significant.

Although sharp differences existed between attitudes of boys and girls regarding premarital sexual activity, it is safe to say that a significant proportion, at least a third of the high school seniors, do not hold strongly negative attitudes concerning sexual activity before marriage. Moreover, traditionally in our culture, one deterrent to premarital sexual activity has been its detrimental effect on boys' perception of girls' reputations.

However, the response to Statement 15 indicates that this is not an important area of concern for a majority of the boys. Consequently, the absence of this block, coupled with the advent of more effective contraceptive techniques and increased incidence of "going steady" (Statement 36), may result in greater premarital sexual activity. In reality, too, it may be that this hypothesis has been realized. Evidence from the mass media regarding sexual activity of unmarried college students, for example, would suggest that the foregoing warning comes too late.

In any event, the potential exists for increased sexual activity among teenagers. Old taboos are being questioned and rejected.

Fears of past ages, such as pregnancy and disease, no longer stand as realistic impediments to premarital sexual activity of today's teenagers. Rules of behavior imposed by the church, family and culture are questioned by an attitude in which each boy and girl says, "I must decide these issues for myself."

Generally, arguments concerning premarital sex ignore some of the more powerful long-range consequences. Current knowledge of human psycho-sexual development strongly implies that premarital promiscuity is detrimental if the adult goal is a lasting monogamous

heterosexual relationship. Thus, the attitudes and conditions which prevail in the teenage and subculture may be at odds with the individual's long-range good. It is, therefore, imperative that young people be made aware of the possible deeper, long-range consequences of premarital sexual activity, which will help them in making decisions about their behavior based upon more adequate evidence than has heretofore been available.

Curricular Offerings Related to Sex

Evidence shows that at both the elementary and the secondary levels, schools in rural areas have more limited curricular offerings related to sex and human growth and development than are found in schools from other types of communities. Differences in curricular offerings among secondary schools from non-rural communities are small. At the elementary level, schools from urban fringe communities rank highest in inclusion of curricular offerings dealing with sex and human growth and development. Autonomous cities rank second, followed by central city schools.

Data show that instruction focuses on technical or factual knowledge about sex and human growth and development, but the emotional, judgmental and causal aspects are frequently omitted. For example, more than 75 percent of the schools give instruction about human reproduction, whereas less than half indicate that they include the emotional aspects of sex in instruction. In less than 25 percent of the schools, ways of dealing with sex feelings are taken up as a regular part of the sex education program. Thus it is safe to infer that many schools are not attempting to resolve the most significant issues related to sexuality — its emotional basis and how to deal with it.

Slightly less than half of the schools promote instruction at the secondary level in preparation for parenthood, and much of this involves a separation of the sexes for instruction.

4a. Drug Knowledge, Attitudes and Curricular Offerings — Elementary Level

The test consists of 12 items and has a Kuder-Richardson "20" reliability of .38 when given to 7th grade students. The test proved too short and too variable as indicated by a reliability of .38. A test of similar length at the secondary level yielded a reliability of .64, indicating that factors other than length were operating. The reading level of the statements may have been too high for the 7th grade. Oral administration of the test, for example by using a tape recorder, may

have circumvented this difficulty. This procedure was considered but was not feasible in this study. The results at the secondary level, however, where the test reliability is higher, corroborate the findings of a rather low level of knowledge in this area.

The total mean score at the elementary level is 3.12, which is approximately 26 percent of the total possible score. The standard deviation is 1.79. Only nine percent of the students answered six or more of the 12 statements correctly. Analysis of variance reveals no variation due to sex or type of district variables.

The attitudes of elementary students toward drugs was studied by the use of 15 statements concerning drugs to which the student responded with disagrees, agrees or uncertain.

The attitudes as revealed by these 15 statements give both encouragement and cause for concern. A large majority (86.6 percent) agreed with the statement that using drugs can have a bad eflect on a person's future. Sixty-four percent agreed that there are ways to relieve boredom other than taking drugs which will be more helpful in the long run. Seventy-five percent disagreed that smoking marijuana ("pot") is not dangerous, and 83 percent agreed that once a person gets "hooked" on drugs, it is very difficult to break the habit.

On the negative side only 41 percent disagreed with the statement that it is easy to predict the effects of LSD on an individual. Only 56 percent indicated they felt that most young people know how to go about relieving boredom in a healthful, satisfying way. For almost every statement, a fairly sizable percentage of students were either uncertain or gave a response suggesting a non-constructive attitude. Even an optimistic view of the results would suggest that a sizable percentage of students need help to acquire a more realistic and constructive attitude toward the use of drugs as a method of solving problems.

The results of the curriculum interview section are summarized in Table IV. The last column of Table IV shows the total number and percentage of all types of school systems systematically offering each curricular topic. As can be seen, all of the percentages are low; the range is 12-28. The topic receiving the highest percentage is item M, relating to the effects of drugs; 28 percent of the 50 school systems systematically offer their elementary students material designed to teach the effects of drugs. Inspection suggests that urban fringe systems may be offering more systematic instruction than the others.

TABLE IV

Percentage of School Districts Offering Systematic Instruction Concerning Drugs at the Elementary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM								(50 systems) TOTAL	
	Central City (4 systems)		Urban Fringe (19 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)			
	%	No.	%	No.	%	No.	%	No.	%	No.
M Is instruction given concerning the effects of drugs?	25	1	47	9	30	3	6	1	28	14
N 1 Is instruction given concerning the reasons people turn to the excessive use of alcohol, tobacco, and drugs?	0	0	32	6	0	0	0	0	12	6
N 2 Are all three dealt with?	0	0	32	6	0	0	0	0	12	6
O Is instruction given concerning constructive ways of dealing with problems which sometimes cause people to turn to excessive use of alcohol, drugs and tobacco?	0	0	26	5	0	0	12	2	14	7

However, as the percentages in the last column indicate, few systems in Ohio have systematic elementary level instruction related to the various aspects of drug behavior.

In summary, the findings strongly suggest that a substantial portion of students who have completed the 6th grade have a low level of drug knowledge and have attitudes toward drugs which could be termed non-constructive. A very low percentage of schools offer instruction intended to teach the effects of drugs and an even lower percentage offer material designed to teach the causal factors involved in drug abuse or constructive ways the problems giving rise to drug abuse could be solved.

4b. Drug Knowledge, Attitudes and Curricular Offerings — Secondary Level

The test administered to the 12th grade students to determine their drug knowledge and attitudes consisted of 12 statements and had a Kuder-Richardson reliability of .64. These statements sampled the accuracy of student knowledge about the effects of drugs.

The total mean score for the 12 drug knowledge statements is 5.234 and the standard deviation is 2.38. Approximately 68 percent of the students answered between three and eight of the 12 statements correctly. Eighty percent answered less than nine correctly. Analysis of variance indicates that the scores vary significantly by type of school. Students in central city and rural town and counties appear

to have somewhat less drug knowledge than urban fringe and autonomous city students. The total mean of 5.234, however, suggests a fairly low level of drug knowledge for all 12th grade students.

Attitudes toward drugs were in part evaluated by means of 24 drug-related statements to which the student responded by indicating whether he agreed, disagreed or was uncertain.

The responses to the 24 drug attitude statements — like those to the elementary level statement — give both encouragement and cause for concern. On the positive side, approximately 95 percent of the 12th graders agreed that using drugs can have a bad effect on a person's future. Approximately 91 percent agreed that there are ways to relieve boredom other than taking drugs which will be more helpful in the long run.

But a sizable proportion of students demonstrated through their responses either uncertainty or non-constructive attitudes toward drug use and related problems. A total of 34 percent were either uncertain about or agreed with the statement that learning about drugs will have little or no effect on whether drugs will be used. These students might show little inclination to learn about possible harmful effects of drugs. Approximately 58 percent were either uncertain about or agreed with the statement that taking drugs will make an unhappy person feel better. Thus a fairly large proportion of the students may be disposed to view drugs as a method for decreasing unhappiness. Only 57 percent rejected the statement that taking drugs can always be counted on to relieve feelings of boredom. Only 76 percent rejected the statement that smoking marijuana was not dangerous. Or, stated another way, 23 percent may view marijuana as having no ill effects. Such a situation may predispose these students to at least try smoking marijuana.

Comparison of percentages of responses to the various items among the four types of school districts indicates that central city students tend to have less constructive attitudes toward drugs than students from the other districts. For example, only 55 percent of central city students disagreed with the statement that learning about drugs will have little or no effect on whether drugs will be used as compared to 74, 68 and 71 percent for the other districts. Ninety-one percent of central city students agreed that using drugs can have a bad effect on a person's future compared with 97, 96 and 97 percent for the other districts. Eighty-seven percent of central city students agreed that there are ways to relieve boredom other than taking drugs which will be more helpful in the long run, compared with 92, 94 and 92 percent

for the other districts. Ninety percent of central city students agreed that once a person gets "hooked" on drugs, it is very difficult to break the habit, compared with 96, 93 and 94 percent for othe other districts. In most cases the differences were not great, but a trend for less constructive attitudes for central city students is apparent.

The students' attitudes were also sampled by means of a semantic differential technique which consisted of a concept — such as Smoking Marijuana ("Pot") — which the student evaluated by means of 13 bi-polar scales. Each bi-polar scale had five intervals so that the student could indicate the degree to which he believed the concept, for example, important or unimportant.

CONCEPT: SMOKING MARIJUANA ("POT")

(1) *Value:*
The first three scales (Important-Unimportant, Desirable-Undesirable, Healthy-Unhealthy) can be grouped together and called "Value." The majority of 12th grade students regarded smoking marijuana as having low value, but about 20 percent indicated it important. (The 20 percent was determined by adding the percentage who marked either four or five in the Important-Unimportant scale. In the following discussions the percentages given relate to either end of the continuum, i.e., either the combined percentages marking a four or five or, at the other extreme, the percentage marking a one or two.)

(2) *Pleasure:*
The next three scales (Pleasant-Unpleasant, Exciting-Boring, Enjoyable-Unenjoyable) can be thought of as comprising a "pleasure" category. Approximately 17 percent rated it pleasant, 30 percent exciting and 23 percent enjoyable.

(3) *Moral:*
Three scales (Good-Bad, Clean-Dirty, Right-Wrong) comprise the "Moral" category. The percentages marking the practice as bad (78 percent) and wrong (77 percent) are fairly high.

(4) *Social Acceptability:*
This category comprises the following scales: Safe-Dangerous, In-Out, Acceptable for Teenagers-Unacceptable for Teenagers, Acceptable for People over 21-Unacceptable for People over 21. The majority of students apparently do not view smoking marijuana as socially acceptable, but a disconcerting 27 percent do view it as an "in" activity.

In summary, although a majority of 12th grade students indicate a constructive attitude toward smoking marijuana, a substantial percentage take a non-constructive view; that is, they view it as important to them, pleasurable to them and, although not very moral, an "in" thing to do. The low morality of the act may not be a sufficient deterrent to overcome higher value, pleasure and social acceptability factors.

CONCEPT: USING DRUGS FOR KICKS

(1) *Value:*

Although for the most part Using Drugs for Kicks is viewed as being of low value, approximately 15 percent view this activity as important to them. A large majority, 86 percent, view it as unhealthy.

(2) *Pleasure:*

Thirteen percent rate it pleasant, 27 percent exciting and 17 percent enjoyable.

(3) *Moral:*

No more than about three percent rate it as either good, clean or right.

(4) *Social Acceptability:*

Over 24 percent view Using Drugs for Kicks an "in" activity, but only about two percent view it as safe.

In summary, most secondary level students consider this activity as having low value and low moral characteristics. A larger proportion consider it exciting and an "in" thing to do. The appeal of drugs would seem to relate to the excitement, which is either experienced or expected, and the satisfaction associated with an "in" activity.

CONCEPT: TRYING TO BREAK A DRUG HABIT

(1) *Value:*

The majority of 12th graders view trying to break a drug habit as being of high value.

(2) *Pleasure:*

As might be expected, the majority tend to view breaking a drug habit as unpleasant and unenjoyable.

(3) *Moral:*

The great majority also view it as highly moral. However, a surprising 13 percent tend not to consider it the "right" thing to do.

(4) *Social Acceptability:*

Approximately 30 percent view trying to break a drug habit as dangerous. About 21 percent consider it "out." Approximately 13 percent consider it unacceptable behavior for teenagers and about the same percentage do not consider it acceptable for people over 21.

It is puzzling that 13 percent would rate trying to break a drug habit a wrong thing to do and 21 percent an "out" thing to do.

CONCEPT: SNIFFING GLUE

(1) *Value:*

Approximately 18 percent view sniffing glue as important to them, but only about seven percent rate it a desirable behavior. Only three percent think it is healthy.

(2) *Pleasure:*

Approximately 21 percent think of it as exciting and 16 percent think of it as enjoyable.

(3) *Moral:*

A low percentage of students, approximately three to five percent, consider it good, clean or a right thing to do.

(4) *Social Acceptability:*

It is not generally thought of as a safe thing to do. Only four percent think so, but about 11 percent think it is acceptable for teenagers.

Again, drugs are viewed as having low moral characteristics. In view of increasing use of drugs by teenagers, it may be a tenable hypothesis that for many students morality may not be an important factor in determining whether drugs will or will not be used.

Table V lists the data concerning curricular offerings. The percentage range of school systems having systematic offerings of the various drug related topics is 20-66. The topic having the highest percentage related to the effects of drugs. Analysis of the original data shows this type of curricular offering is typically included in a health text. Comparatively fewer districts, on the other hand, have material concerning constructive ways of dealing with problems which

sometimes cause drug, alcohol and tobacco use; few health texts and curricula treat this aspect. Comparison of school districts indicates a greater percentage of urban fringe districts having systematic offerings at the secondary level. Apparently, few central city systems deal with any topic other than the effects of the drugs.

TABLE V

Percentages of School Districts Offering Systematic Instruction Concerning Drugs at the Secondary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM								TOTAL (50 systems)	
	Central City (4 systems)		Urban Fringe (19 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)			
	%	No.	%	No.	%	No.	%	No.	%	No.
M Is instruction given concerning the effects of using drugs?	50	2	79	15	70	7	53	9	66	33
N 1 Is instruction given concerning the reasons people turn to excessive use of alcohol, tobacco and drugs?	25	1	53	10	40	4	41	7	44	22
N 2 Are all three dealt with?	25	1	47	9	30	3	53	6	38	19
O Is instruction given concerning constructive ways of dealing with problems which sometimes cause people to turn to excessive use of alcohol, drugs and tobacco?	0	0	21	4	10	1	29	5	20	10

In summary, it appears that a substantial number of 12th grade students (1) lack knowledge concerning the use and effects of drugs, and (2) receive little instruction as to the causes of drug abuse or ways in which these causative factors would be dealt with in a constructive fashion. Although a majority of them have what could be considered constructive attitudes toward the use of drugs, a significant number have what could be termed non-constructive attitudes.

5a. Student Knowledge, Attitudes and Behavior Toward the Use of Tobacco

Student Report of the Use of Tobacco

One of the purposes of this study was to determine the smoking habits of students at the end of the 6th grade and as high school seniors. One of the questions on Part I (Personal Data) of Tests SE and EE was:

Do you smoke?

A. Yes, more than 5 cigarettes a day.

B. Yes, less than 5 cigarettes a day.

C. No.

Students who answered A or B were classified as smokers, while students who answered C were labeled non-smokers.

Thirty-one percent of the high school senior boys and 22.2 percent of the girls were classified as smokers. The highest proportion of smokers for boys was found in urban fringe communities with the smallest percentage in autonomous cities. Among the girls, the greatest frequency of smoking occurred in the central city and urban fringe.

Among the elementary school students in the sample, smoking was most frequent in the central city and urban fringe for both boys and girls, although the difference was not significant in the case of boys. There was a relatively low frequency of smoking among girls from autonomous cities and rural areas.

Smokers were divided into heavy smokers and light smokers on the basis of whether they smoked more or less than five cigarettes a day. The majority of senior high school boys who smoked fell into the category of heavy smokers, while senior girls were about evenly divided between the two groups. Most of the elementary school students who smoked were classified as light smokers.

Over 14 percent of the boys and five percent of the girls in this sample were smoking, at least occasionally, at the end of the sixth grade. It appears that waiting until junior high school to instruct students concerning the causes for and effects of using tobacco may come too late for many students if its purpose is to help prevent pupils from starting to smoke cigarettes.

Do high school seniors who smoke differ in personal characteristics from those students who do not smoke? The personal data section of Test SE surveyed some of the variables which might be associated with smoking. The data indicates that students from homes with one or more parents absent were much more likely to smoke than those from homes where students lived with both parents.

The use of a Chi-Square test failed to reveal any significant difference in the proportion of smokers when the number of children in the family were considered. However, there was a trend among boys for the frequency of smoking to increase as the number of siblings increased. There was also a relatively high proportion of smokers among boys and girls who were in the "only child" category. No sig-

nificant difference was found when the father's level of education was considered.

No significant difference was found in the percentage of smokers among boys when the number of times they had moved to a new community in the last five years was considered. However, there was a significant difference among girls because of the relatively low frequency of smokers among those who had not moved to a new community during that period.

The influence of religion on smoking habits was assessed by examining the students' stated frequency of church attendance. Those students who stated that they attended church every week or almost every week were classified as regular attendants, while those who responded that they attended about once a month or a few times were classified as irregular attendants. The third group consisted of students who stated that they did not attend at all. The results indicated that the highest proportion of smokers was found for those students who reported that they did not attend church and that students classified as regular attendants were the least likely to smoke.

Other factors considered in assessing the characteristics of smokers concerned whether the student had an after-school job, owned a car, was an above average student, planned to go to college and whether the student was going steady.

A review of the personal characteristics covered in this study indicated that among the high school students in this sample smoking was associated with those characteristics which have to do with personal independence. Smokers, both boys and girls, were more likely to have an after-school job, to own a car and to be going steady than non-smokers. They were also less likely to be above-average students and, in the case of boys, were less likely to be college bound.

Attitudes Toward Smoking

In Part II of Test SE and EE students were asked to indicate their attitude toward smoking by responding to multiple-choice items. There were three questions of this type. The results are indicated below.

1. Teenagers who smoke usually start smoking because:
   A. They wish to appear grown-up.
   B. Their friends smoke.
   C. They are curious about the effects of smoking.
   D. Smoking is a pleasant means of relaxing.
   E. They want to rebel against their parents and other authorities.

The most frequent response given by both elementary and secondary students was that they thought teenagers started smoking because they wished to appear grown-up. However, the proportion of students who responded this way was much smaller for seniors than for elementary students. The greatest increase from elementary to high school was in the proportion of students who indicated that teenagers began smoking because their friends smoked.

One of the questions asked was whether students who smoked answered this statement differently than those who were non-smokers. Since the proportion of smokers among elementary students was small, only the responses of senior high school students were analyzed.

The most frequent response to this statement by non-smokers was A, "They wish to appear grown-up." However, smokers most frequently responded that teenagers begin to smoke because their friends did. Smokers were also more likely to respond that teenagers begin to smoke because "It is a pleasant means of relaxing."

2. Which of the following statements best expresses your own attitude?

   A. There is nothing wrong with smoking as long as a person smokes moderately.

   B. No one should be allowed to smoke.

   C. There is nothing wrong with smoking.

   D. Smoking is a dirty habit.

   E. Smoking is a harmless, pleasant activity.

There was a pronounced difference between the responses of elementary and secondary students on this question. While the most frequent answer in both cases was D — "Smoking is a dirty habit" — secondary students were less likely to give this response. The greatest difference was in the proportion of students answering A and B. There was a substantial increase in the number of students willing to accept A — "There is nothing wrong with smoking as long as a person smokes moderately" — and a dramatic decrease in the percent of students responding with B — "No one should be allowed to smoke."

Smokers most frequently expressed their attitude toward smoking by selecting A — "There is nothing wrong with smoking as long as a person smokes moderately." They were also more likely than non-smokers to respond even more positively by accepting C — "There is nothing wrong with smoking." Non-smokers most frequently responded

with D, that smoking is a dirty habit, a response selected by almost 20 percent of the smokers.

3. Joe is 25 years old and has smoked cigarettes regularly for eight years. He now smokes over a pack a day. He says that he enjoys smoking and finds that it helps him relax. He also knows that there is considerable evidence that smokers do not live as long as non-smokers. What should he do?

   A. Give up smoking completely.

   B. Continue smoking because he can always quit if it starts to affect his health.

   C. Switch to filter-tip cigarettes.

   D. Give up smoking but find another means of helping him relax such as chewing gum.

   E. Since he seems to enjoy smoking a great deal, he should continue because the possibility of dying from the effects of smoking are relatively small.

Secondary students were less willing than elementary students to accept answer A, which requires the person to give up smoking completely, and more willing to accept answer D, which suggests that he substitute something in place of smoking. Although the proportion was small, the percent of students who were willing to accept alternative E nearly doubled between elementary and secondary students.

Although a majority of both smokers and non-smokers selected alternative D, a greater proportion of non-smokers made this choice than smokers. Non-smokers were also more likely to select A, indicating that the subject in question should quit smoking altogether. A major difference was found in the proportion selecting E, which is a somewhat fatalistic response. Almost one-sixth of the smokers agreed to this alternative.

Smokers and non-smokers were compared on one additional item: They were asked to give their interpretation of data concerning the correlation between incidence of death and smoking.

Statement 4 on the secondary test (SE, Part II) gave a table showing the causes of death among 1,123,000 men studied during periods of two to 10 years. The "Expected Deaths" column shows the number of deaths expected, based on the death rate of non-smokers. The second column "Observed Deaths" shows the actual death rate of cigarette smokers. This is the information included in Statement 4:

Expected and Observed Deaths for Cigarette Smokers for Two Major Diseases

Causes of Death	Expected Deaths (non-smokers)	Observed Deaths (cigarette smokers)
Coronary heart disease	6,430	11,177
Cancer of the lung	170	1,833

4. Which of the following statements best expresses your evaluation of this information?

   A. This information proves that cigarette smoking causes coronary heart disease and lung cancer.

   B. Although this information does not prove that cigarette smoking causes coronary heart disease and lung cancer, it does indicate that there is a connection between smoking and these two diseases.

   C. Although this information seems to show some connection between cigarette smoking and cancer and coronary heart disease, the number of people who died from these diseases (about 13,000 out of over a million) is so small that it is not worth worrying about.

   D. This information doesn't really show much of anything because there could have been many other things that influence the death rate besides smoking.

   E. This information is worthless since it does not show why cigarette smoking causes coronary heart disease and lung cancer.

This statement asked the student to evaluate some data which might be interpreted to associate cigarette smoking with coronary heart disease and cancer of the lung. More boys than girls accepted response A, that this information proved that cigarette smoking caused these diseases. However, there was no significant difference between the proportion of smokers and non-smokers who accepted this response. Smokers selected response D more frequently than did non-smokers. A majority of both groups responded with B, although the proportion of non-smokers was somewhat higher.

Attitudes as Determined by Semantic Differential

The Semantic Differential used in this survey consisted of 13 bi-polar scales representing various reactions to "Smoking Cigarettes." The 13 bi-polar scales are:

IMPORTANT	—	UNIMPORTANT
DESIRABLE	—	UNDESIRABLE
HEALTHY	—	UNHEALTHY
PLEASANT	—	UNPLEASANT
EXCITING	—	BORING
ENJOYABLE	—	UNENJOYABLE
GOOD	—	BAD
CLEAN	—	DIRTY
RIGHT	—	WRONG
SAFE	—	DANGEROUS
"IN"	—	"OUT"
ACCEPTABLE FOR TEENAGERS	—	UNACCEPTABLE FOR TEENAGERS
ACCEPTABLE FOR PEOPLE OVER 21	—	UNACCEPTABLE FOR PEOPLE OVER 21

A five-point scale was used throughout, and integral values were assigned for scoring, ranging from one for the least favorable response to five for the most favorable response.

The 13 scales were grouped into four major categories:

Value	—	Scales 1-3
Pleasure	—	Scales 4-6
Morality	—	Scales 7-9
Social Acceptability	—	Scales 10-13

Since the value, pleasure and morality categories each consisted of three scales, the maximum possible score for each category was 15. A score greater than nine would suggest a favorable attitude, and less than nine would indicate an unfavorable attitude. The sociability category contained four scales; consequently, the maximum possible score was 20. A score greater than 12 would indicate a favorable attitude, whereas a score less than 12 would be related to an unfavorable attitude.

Individual responses were totaled as outlined above, and mean and standard deviations were computed. Two-way analysis of variance was also determined using Winer's Case I for unequal cells.

Students at both the elementary and the secondary level were compared by sex and type of community on all four categories on the issue labeled "smoking cigarettes."

F-ratios based on type of community were significant at the .05 level for all four categories. In each case students from the urban fringe rated smoking cigarettes more favorably than students from other types of communities. Boys from rural communities gave the

lowest ratings among boys, while the central city and autonomous cities had the lowest ratings for girls. Only one F-ratio based on sex was significant at the .05 level. This occurred in the pleasure category, where boys rated smoking cigarettes higher than girls.

F-ratios were again significant at the .05 level when students from different types of communities were compared. Among boys, students from autonomous cities tended to rate smoking cigarettes lower than other students, while boys from urban fringe communities rated smoking higher. Girls from rural areas and autonomous cities rated the issue lower, while the highest ratings were found in the urban fringe. All F-ratios based on sex were not significant. When elementary and secondary students were compared, "smoking cigarettes" was more highly rated by the secondary students in all categories. In general the ratings across types of communities paralleled the use of tobacco in each type of community. Although not as many girls smoke as boys and those girls who do smoke tend to smoke less, the ratings in the semantic differential showed no significant difference between the attitudes of boys and girls.

Summary

The reasons that students begin to smoke are largely social. While non-smokers most frequently indicated that they thought teenagers started to smoke because they wished to appear grown-up, smokers most frequently indicated that teenage smokers started because their friends smoked. A comparatively small proportion of smokers stated that teenagers started smoking because of the pleasure it provided.

The extent to which student smokers have rationalized their behavior is indicated by the consistency they exhibited in attitude measures. These students seemed to be aware of the potentially undesirable effects of excessive smoking. However, they considered the immediate satisfactions provided as overriding the long range potential effects. It appears that instruction which treats only the effects can provide little to change the behavior of persons who have incorporated smoking behavior into their everyday philosophy of life.

6a. Knowledge, Attitudes and Behavior Towards the Use of Alcohol

A thirty-five item test related to knowledge about the effects of the use of alcohol was given to all seniors taking Test SE. The use of the Kuder-Richardson Formula 20 gave an estimated reliability for this test of .55.

F-ratios were significant at the .05 level for type of community and sex. Girls on the average scored higher than boys. Lowest average

scores were found in the central city with students from autonomous cities having the highest average score. The average score was approximately 21 correct items out of a total of 35 items.

A similar test of knowledge of the use and effects of alcohol was given to students at the end of the sixth grade. This test consisted of 28 statements with an estimated overall reliability of .64 based on the Kuder-Richardson Formula 21. No difference in scores was found due to sex. However, differences due to type of community were found to be significant at less than the .05 level.

Students from urban fringe and rural communities had the highest average scores while students from the central city had the lowest average scores. The average score for all students was about 12 correct items out of a possible 28.

Attitudes Toward the Use of Alcohol

Student attitudes were assessed through the use of the semantic differential. The use and design of this device was discussed earlier as it related to student attitude toward smoking. Three issues related to alcohol were used: (1) Drinking whiskey, (2) Drinking beer, and (3) Drinking on a date.

High school seniors rated these issues more favorably than did students at the end of the 6th grade. Drinking beer seemed to be the most socially acceptable of the three issues even among the elementary students. At the secondary level boys rated all three activities consistently higher than girls. Students from the urban fringe rated these issues higher than students from other areas. Students from autonomous cities and rural areas consistently gave the lowest ratings.

Students were also asked four questions related to why they thought people drink alcohol and about their own attitude toward drinking. The results are given below.

The most important reason why adults drink is:

A. To be sociable with others.

B. For pleasure or recreation.

C. It is a habit with them.

D. To prove they can hold it.

E. It makes them feel important.

Secondary students more frequently related adult drinking to sociability and pleasure, responses A and B, than did elementary students. Elementary students were more likely than secondary students to select the three negative choices, responses C, D and E.

The most important reason why teenagers drink is:

A. To see what it is like.

B. They are bored and have nothing better to do.

C. Because they don't know any better.

D. To act grownup.

E. They want to be one of the crowd.

A higher proportion of girls selected alternative E than boys. Elementary students were also more likely to make this choice. Secondary students seem to prefer response D.

Which of the following statements best expresses your own attitude toward drinking by adults?

A. Drinking is all right.

B. Drinking is all right, if one doesn't drink too much and lose self-control.

C. Drinking is sometimes all right, and sometimes wrong, depending upon the circumstances.

D. Drinking is wrong, but it is the individual's own business.

E. Drinking is never right no matter what the circumstances.

Which of the following statements best expresses your own attitude toward drinking by teenagers?

A. Drinking is all right.

B. Drinking is all right, if one doesn't drink too much and lose self-control.

C. Drinking is sometimes all right, and sometimes wrong, depending upon the circumstances.

D. Drinking is wrong, but it is the individual's own business.

E. Drinking is never right no matter what the circumstances.

There was little difference in the attitudes of elementary and secondary students toward drinking by adults. The most frequent response was that drinking in moderation is acceptable, choice B, or response C, that its acceptability depended upon the circumstances.

In their expressed attitude toward drinking by teenagers, elementary students were more likely to select D or E, the more negative responses. Seniors more frequently indicated that drinking is acceptable in moderation or depending on the circumstances, choices B and C. Seniors were also more likely to give the unqualified response A concerning the acceptability of drinking. There was little difference between boys and girls. However, very few girls were willing to accept alternative A. A somewhat greater proportion of girls than boys were willing to accept E, that drinking is never right no matter what the circumstances.

SUMMARY

The relatively high rating on the social acceptability scale "Drinking Beer" indicates the popularity of this activity. Even girls rated this dimension fairly high. The relatively low rating for "Drinking on a Date" suggested that teenage drinking is most popular among groups of boys rather than in mixed company. As with smoking, teenage drinking is largely a social phenomenon. This hypothesis is supported by the fact that 80 percent of the seniors felt that grown-ups drink either to be social or for pleasure and recreation. Forty-five percent of the seniors felt that teenagers drink to appear grown-up, and about 35 percent indicated that teenagers drink to be one of the crowd.

CURRICULAR OFFERINGS RELATED TO USE OF TOBACCO AND ALCOHOL — *Elementary School*

The results of this survey indicated that many students begin their smoking behavior early. About 14 percent of the boys and five percent of the girls were already smoking cigarettes at the end of the 6th grade. This suggests that effective education concerning the use and effects of tobacco should begin before junior high school. Of the 50 schools surveyed in this study, 16 offered no experiences related to the effects of using tobacco, and 11 others had only non-systematic offerings in the elementary school.

Instruction dealing with the reasons why people turn to the excessive use of tobacco and other substances was offered in only five of the 50 schools on a systematic basis at the elementary level. Instruction concerned with constructive ways of dealing with problems that may lead to the excessive use of tobacco and other substances was found in only six schools in the sample.

Curricular Offerings Related to the Use of Tobacco — Secondary School

The proportion of students who smoke increased rapidly through the junior and senior high school, as indicated by the fact that in the senior year about 31 percent of the boys and 22 percent of the girls in this survey were smoking cigarettes.

While almost all of the schools in the survey provided some form of instruction concerning the use of tobacco, less than half had a systematic program dealing with the causes of excessive use of tobacco. Only 10 schools reported a systematic program concerning constructive ways of dealing with problems which sometimes cause people to turn to excessive use of tobacco.

Curricular Offerings Related to the Use of Alcohol

Curricular offerings concerning the use of alcohol closely paralleled those related to using tobacco. Fifty percent of the elementary and 86 percent of the secondary schools reported the inclusion of systematic instruction in this area.

SUMMARY

It appears that instruction concerned with the use of alcohol should take into account the fact that most teenage drinking is a means of acquiring social acceptance. Many teenagers may not be swayed by arguments concerning the physical effects of the use of alcohol, since their value system puts the immediate effects of social acceptance ahead of the remote, potential dangers involved. The students' concept of drinking as a desirable, acceptable behavior is further enhanced by the picture portrayed by the mass media of the young, healthy, happy person indulging in this form of behavior.

7a. KNOWLEDGE OF AGGRESSIVE BEHAVIOR AND CURRICULAR OFFERINGS — ELEMENTARY LEVEL

It was possible to include only a short test to probe knowledge of causes of aggressive behavior at the elementary level. The test consisted of six items. It yielded a Kuder-Richardson reliability of .53 for 7th grade students. The total mean was 3.041 and the standard deviation was 1.60. The mean was practically 50 percent of the total possible score. About 43 percent answered four or more questions correctly. Significant variations in scores occur according to sex and type of school variables; the mean score for females is significantly higher than for males. Urban fringe and rural town and county students score higher than central city and autonomous city students. The scores in this test were generally higher percentagewise than the other knowledge tests although not as high as would seem desirable. The situations were relatively simple, and a score of five would not seem unreasonable.

With regard to curricular offerings, 28 percent of the school systems in the sample systematically offer elementary level curricular material dealing with the various aspects of aggression described. The range of percentages between types of systems is 20 percent (autonomous cities) to 50 percent (central city). Apparently, few Ohio elementary systems systematically offer curricular materials relating to aggressive conflict, although relatively more central city systems have systematic offerings than do the other types.

In summary, the elementary students have some knowledge of causes of aggressive behavior, but the chances for adding to their

knowledge are lessened by the lack of systematic instruction related to aggressive conflict in the schools. The curricular topic considered is an important one, namely, learning constructive methods for resolving differences.

7b. Knowledge of Aggressive Behavior and Curricular Offerings — Secondary Level

A test was designed to measure the student's knowledge of causes of aggressive action. At the secondary level the eight-statement test has a Kuder-Richardson reliability of .38.

The total mean score was 5.612 and the standard deviation was 1.52. Approximately 68 percent of the 12th grade students answered from four to seven questions correctly, and about 80 percent answered five or more correctly. Analysis of variance reveals that the scores were affected by both sex and type of school variables. Girls appear to have greater knowledge of the causes of aggressive behavior than do boys. Urban fringe students scored significantly higher on the test than did students from the other systems. In general, 12th grade students seem more knowledgeable about the causes of aggressive behavior than about most of the other knowledge areas tested.

Of the 50 school systems in the sample, only 18 (36 percent) report systematic secondary level curricular offerings related to constructive resolution of aggressive conflict. Minor differences in percentages between types of districts appear.

In summary, the 12th grade students have a better knowledge of the nature of aggressive behavior than of the other types of knowledge surveyed. This knowledge seems to have been acquired from sources other than the schools, as only 36 percent of the schools report systematic offerings relative to aggressive conflict.

8a. School and Family Authority Situations — Elementary Level

The examination of learnings related to school and family authority situations was affected through the administration of a test to pupils who had completed the 6th grade (beginning 7th graders) and through an interview with the elementary curriculum coordinator regarding specific curriculum offerings in this area. The test consisted of two parts and the pupils responded by indicating agree, disagree or uncertain for each item. The first part contained six items measuring the child's conception of the teacher — whether or not he considered the teacher as basically a guide to assist him in his learning. The second part, consisting of nine items, assessed the child's confidence in

the teacher as someone in whom he could confide. The test has a Kuder-Richardson "20" reliability of .76.

The mean for the total group was 2.48, approximately 40 percent of the total possible score of six. This overall mean score is much below a level which would indicate that elementary pupils view the teacher primarily as a guide whose main job is to assist them in their learning. The analysis of variance of scores on this first part yielded significant differences between the sexes and among the types of school systems (F's of 8.48 and 8.59 respectively, both significant at the .01 level of confidence).

The data for the second part, measuring the child's confidence that the teacher will work with him in an understanding way, show a total mean for all students of 4.65, slightly more than 50 percent of the total possible score of nine. This total mean score falls below a level indicative of sufficient confidence in the teacher as someone in whom the pupil might confide.

Overall, girls appeared to have more confidence in the teacher than boys as evidenced by their higher mean scores, which was the case for all types of school systems. An analysis of variance indicated that this difference between the sexes was quite significant (.001 level of significance for an F of 38.74). The analysis of variance also showed a significant difference among types of school systems (F of 4.00 significant at the .01 level of confidence) with pupils from the inner city having less confidence that the teacher would react understandably toward them.

A summary of the results of the interviews with the curriculum coordinators at the elementary level is given in Table VI.

The first column of Table VI shows the curricular topic, while the remaining columns indicate the percent and number of school systems and the total offering instruction in the particular topic.

Inspection of the data in Table VI indicates that for the total number of school systems the percents ranged from 10 to 52 percent. The percents for individual types of systems varied considerably more. There were very wide variations in terms of the degree to which these various curricular topics were systematically offered. They were given least emphasis in rural town and county systems. Overall, the role of the family and the responsibilities of individuals to the family group were given the most emphasis. Relatively little planned instruction was offered regarding constructive reaction to authority (Items V and especially W).

Except for offerings by central city systems, the same was also

true with regard to (1) instruction about some of the basic learning processes so that pupils could take some of the responsibility for guiding their own learning and (2) instruction on how to use this knowledge in the pupil-teacher relationship. It is quite apparent that the elementary curriculum in the State of Ohio needs considerable strengthening on all of these curricular topics.

TABLE VI
Percentages of School Districts Offering Systematic Instruction Concerning Family, School, and Authority Situations at the Elementary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM									
	Central City (4 systems)		Urban Fringe (19 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)		TOTAL (50 systems)	
	%	No.	%	No.	%	No.	%	No.	%	No.
P Is instruction given concerning the role of the family in society?	50	2	52.63	10	70	7	35.29	6	50	25
Q 1 Is instruction given concerning the responsibilities of individuals to the family group?	100	4	52.63	10	60	6	35.29	6	52	26
Q 2 Does instruction include a consideration of the consequences of a family member not fulfilling his responsibilities adequately or reliably?	50	2	42.10	8	40	4	5.88	1	30	15
V Is instruction given regarding the nature and purpose of rules and authority?	50	2	31.57	6	30	3	23.52	4	30	15
W Is instruction given regarding constructive reaction to authority (What do people do when they find that a rule is not helpful?)?	25	1	21.05	4	10	1	11.76	2	16	8
AA 1 Is instruction given to help students understand some of the basic learning processes so that they can take some of the responsibility for guiding their own learning?	75	3	31.57	6	10	1	11.76	2	24	12
AA 2 Is the pupil taught how to use this knowledge in the pupil-teacher relationship? (For example, planning his learning with the teacher, keeping the teacher informed about things which interfere and which he cannot handle, etc.)?	25	1	15.78	3	0	0	5.88	1	10	5

8b. School and Family Authority Situations and Preparation for Marriage and Parenthood — Secondary Level

The pupil learnings related to school and family authority situations and to preparation for marriage and parenthood were examined (1) by administering a test to seniors as to their conception of the teacher's function and confidence that the teacher will practice a causal understanding of behavior; (2) by administering a test of attitudinal items adapted from Schofield's study *The Sexual Behavior of Young People;* and (3) through an interview with the curriculum coordinator at the secondary level regarding specific curricular offerings in the total area.

The test relative to teacher function and practice consisted of two parts with the pupils responding by indicating agree, disagree or

ncertain for each item. The Kuder-Richardson "20" reliability is .77. 'he first section consisted of six items designed to measure the stu-ent's conception of the teacher — whether or not he considered the eacher as someone who is basically a guide to assist him in his learning. 'he second part, containing nine items, assessed the student's confi-ence in the teacher as someone in whom he could confide.

The mean for the total group was 3.29, about 55 percent of the otal possible score of six.

This is an improvement over the results at the elementary level or comparable items. At the elementary level the overall mean was pproximately 40 percent of the total possible score. An analysis of ariance of scores on the first part yielded a significant difference etween sexes (between the .01 and .001 level of significance for an of 10.57) but not among the different types of schools (F of 3.62 pproaching significance at the .01 level of confidence).

With regard to the second part of the test, the total mean for all tudents was 5.37, which was very close to 60 percent out of a total ossible score of nine. Again, this was an improvement over the results or the elementary level on similar items, but still below what seems ecessary for effective student-teacher relationships. The overall mean t the elementary level was approximately 50 percent of the total ossible score.

As at the elementary level, girls seemed to have considerably nore confidence in the teacher than boys. Girls showed consistently igher mean scores in all the types of school systems.

This difference between the sexes was very significant (beyond he .001 level of significance for an F of 59.14) as shown by the results f an analysis of variance. This analysis also indicated a significant ifference among types of school systems (F of 4.34 significant at the 01 level of confidence). The score for the student's confidence in the eacher was lower in the central city than in the other systems.

Attitudinal items adapted from Schofield's Study, referred to earlier in this analysis, concerned attitudes towards adults, intra-family relations, the family as an institution, marriage as an institution and religion.

Attitudes Towards Adults

General attitudes toward adults were explored through State-ments 22 and 25. The statements were as follows:

Statement 22: Very few adults really understand teenagers.

Statement 25: Most adults say one thing and do another.

There were no significant differences between the responses c the males and females on these statements. Of all seniors responding about half agreed with both statements. On Statement 25, about sixth of the students were uncertain as to how they felt.

When community types were considered, there were significan differences in responses. The students of the central cities and rura areas agreed with Statement 25 more often than other students. Stu dents from rural communities demonstrated less uncertainty in thei general attitudes toward adults.

Intra-Family Relations

Student attitudes toward intra-family relations were explore through Statements 2, 13, 18, 21, 31, 38 and 40. The statements wer as follows:

Statement 2: Most parents ought to be stricter with thei children.

Statement 13: Young people can only really be free if they liv away from home.

Statement 18: I'm usually a bit bored when I stay at home in th evenings.

Statement 21: Teenagers should be able to go out in the evenin without having to tell their parents where the are going.

Statement 31: I would rather go to my parents for advice tha to my friends.

Statement 38: Summer holidays without parents are more en joyable.

Statement 40: The family should spend at least one night a week doing something together.

There were no significant differences between boys' and girls responses to Statements 2 and 13. On Statements 18, 21, 31, 38 and 40 boys and girls differed considerably in the way they view intra-family relations. In general, responses indicated that boys sought greate autonomy than girls. However, response to Statement 31 suggested that boys show greater respect for their parents.

In regard to Statements 18 and 40, it is significant that the majority of the students were "a bit bored when they stay home in the evenings," but a larger percent thought "the family should spend one night each week doing something together." Similarly, a majority of the students did not think that living away from home would "really" make them free.

Among the community types, the urban fringe students showed the most independence in regard to family relations. But according to the responses for Statement 21, it seems that some healthy interchange has occurred at the student and parent level in the urban fringe communities, for less than three percent of the urban fringe students agreed that "teenagers should be able to go out in the evening without telling their parents where they are going"; while between 17 and 19 percent of the students in other types of communities agreed with this question.

The Family as an Institution

Student attitudes toward the family as an institution were surveyed by Statements 16, 28 and 37. The statements were as follows:

Statement 16: The advantages of living at home with the family outweigh the disadvantages.

Statement 28: People should realize that their greatest loyalty is to their family.

Statement 37: The family is a sacred institution, divinely ordained.

There was little difference in the reactions between boys and girls on these three statements. On Statement 37, "The family is a sacred institution, divinely ordained," one-fourth of the students indicated they were uncertain. Over 70 percent of the seniors indicated "their greatest loyalty is to their family."

Students from different types of communities differed significantly in their responses to Statement 16. More rural boys and girls disagreed with the statement about the advantages of living at home than did students from other communities. This may be partly because students inferred that "living at home" implies living in rural areas as well, and youthful rural area residents may feel cut off from the excitement associated with metropolitan areas. Thus, the discrepancy may be attributable to causes other than attitudes about the family.

Marriage as an Institution

Attitudes of high school seniors toward marriage as an institution were examined through Statements 5 and 12. The statements were as follows:

Statement 5: It is best to have a good time before you get married because after that life is pretty dreary.

Statement 12: It should be made easier for married people to get divorced if they want to.

There were significant differences between boys and girls on these statements. Over one-fourth (26.8 percent) of the boys and 15 percent

of the girls thought divorce should be made easier. The percent on this statement was higher for urban fringe students than for those from any of the other systems. It is interesting to note that 18 percent of the boys indicated they believe "it is best to have a good time before you are married because after that life is pretty dreary," and another 10.7 percent were uncertain about how they felt.

These data suggest that roughly one-third of the boys and one-fifth of the girls who are about to graduate from high school lack a wholesome attitude toward marriage as an institution. They do not see it as exciting or enjoyable, and they favor dissolution based upon consent.

Religion

Religion and the church are focused upon in Items 30 and 41. The statements were as follows:

Statement 30: The church is the best authority to decide upon matters of right and wrong.

Statement 41: The average man can lead a good life without religion.

There is considerable difference in the way boys and girls responded to Statement 41, "The average man can lead a good life without religion." Thirty-seven percent of the boys agreed with this statement, and only 21 percent of the girls agreed with it. A total of 58.4 percent apparently felt that religion *is* necessary for a good life. In the central city the percent was 74.5, significantly higher than that of any of the other systems (54.6 percent).

On the topic of right and wrong, the majority of the students did not agree that "the church" is the best authority to decide. It is significant that 60.9 percent of the urban fringe students felt this way.

The issue at stake here for family life education concerns how one decides between right and wrong. More than half of the high school seniors surveyed did not favor the church as the authority in such matters.

However, since more than half felt that religion is necessary for the "good life" one may perhaps conclude that the church as it exists today does not meet their needs.

If boys and girls are not abiding by the authority of organized religion in deciding between right and wrong, what then is their basis for decision? It would appear that one role of family life education would be to expose students to various means of moral decision-making as a way of identifying and applying an appropriate approach to this complex matter.

TABLE VII

Percentages of School Districts Offering Systematic Instruction Regarding Preparation for Marriage and Parenthood, Family, School and Authority Situations at the Secondary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM									
	Central City (4 systems)		Urban Fringe (19 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)		TOTAL (50 systems)	
	%	No.	%	No.	%	No.	%	No.	%	No.
E Is instruction given concerning the emotional aspects of sex (e.g. relation of sex, marriage and love)?	50	2	52.63	10	40	4	41.17	7	46	23
E 2 If yes, are boys and girls instructed similarly?	50	2	36.84	7	30	3	11.76	2	28	14
I Is instruction given concerning dating behavior?	25	1	68.21	13	60	6	29.41	5	50	25
J 1 Does instruction help students differentiate between mutually constructive and nonconstructive dating behavior?	50	2	42.10	8	40	4	11.76	2	32	16
J 2 Does instruction include the motivations which underlie constructive and nonconstructive dating behavior?	50	2	26.31	5	30	3	17.64	3	26	13
P Is instruction given concerning the role of the family in society?	75	3	57.89	11	80	8	41.17	7	58	29
Q 1 Is instruction given concerning the responsibilities of individuals to the family group?	50	2	47.36	9	70	7	35.29	6	48	24
Q 2 Does instruction include a consideration of the consequences of a family member not fulfilling his responsibilities adequately or reliably?	25	1	36.84	7	60	6	11.76	2	32	16
R 1 Is instruction given to help prepare individuals for marriage?	75	3	31.57	6	50	5	47.05	8	44	22
R 2 If yes, are boys and girls instructed separately?	25	1	31.51	6	40	4	23.52	4	30	15
S 1 Is instruction given to help prepare individuals for parenthood?	50	2	42.10	8	40	4	52.94	9	46	23
S 2 If yes, are boys and girls instructed separately?	25	1	31.57	7	30	3	35.29	6	34	17
T Is there an opportunity for those who take care of children for pay to learn what children need and how the needs can be met constructively?	75	3	10.52	2	60	6	29.41	5	32	16
V Is instruction given concerning the nature and purpose of rules and authority?	25	1	5.3	1	40	4	29.41	5	22	11
W Is instruction given regarding constructive relations to authority (What people do when they find that a rule is not helpful)?	25	1	15.8	3	20	2	11.76	2	16	8
AA 1 Is instruction given to help students understand some of the basic learning processes, so that they can take some of the responsibility for guiding their own learning?	25	1	10.5	2	40	4	17.64	3	20	10
AA 2 Is the pupil taught how to use this knowledge in the pupil-teacher relationship? (For example, planning his learning with the teacher, keeping the teacher informed about things which interfere and which he cannot handle, etc.)	25	1	10.5	2	40	4	11.76	2	18	9
DD Is instruction given regarding modern methods of birth control?	0	0	0	0	30	3	5.88	1	8	4

A summary of the results of the interviews with the curriculum coordinators at the secondary level is given in Table VII.

The first column in Table VII shows the curricular topic, while the remaining columns indicate the percent and numbers of school systems and the total offering instruction in the particular topic.

Inspection of the data in Table VII indicates that for total number of school systems the percents ranged from 8-50 percent. The percents for individual types of systems, however, varied much more, ranging from 00-75 percent. At the secondary level, as was true at the elementary level, there were wide variations in terms of the degree to which these various curricular topics were systematically offered. Many of them were given least emphasis in rural town and county systems.

Only about 60 percent of urban fringe and autonomous city systems offered any planned instruction concerning dating behavior, and only 25 percent of central city and rural town and county systems dealt systematically with this topic. Instruction which would help students differentiate between mutually constructive and non-constructive dating behavior was offered in a systematic fashion in a very few rural town and county systems and in only 40-50 percent of other types of systems. With the exception of autonomous cities, there was little systematic instruction which included a consideration of a family member's not fulfilling his responsibilities adequately or reliably.

Other than central city systems, planned instruction which was designed to help prepare individuals for parenthood was given in about half of the autonomous city and rural town and county systems and in just a third of urban fringe systems. Only 40-50 percent of all systems had any systematic instruction to help prepare individuals for parenthood. In view of the very important role that dating and ultimately marriage and parenthood play in our society, the extent of systematic course offerings dealing with these topics leaves much to be desired.

9a. Developing a Philosophy of Life — Elementary Level

The extent to which schools were providing opportunities to make a beginning at the elementary level in learning to build a philosophy of life was examined through interviews with curriculum coordinators. Data concerning curricular offerings relative to several aspects of the topic are given in Table VIII. The last column of the table indicates that only a low percentage of school districts systematically offered their elementary students instruction in the various topics related to building a philosophy of life.

The percentage range was 4-28. Inspection of the percentages by district suggested that systematic instruction was offered in fewer rural town and county districts than in other areas. The last two items

in the table showed that almost no attention was given to helping pupils make the beginnings in applying their ideas to daily situations.

TABLE VIII
Percentages of School Districts Offering Systematic Instruction in Building a Philosophy of Life at the Elementary Level

Curricular Topic	TYPE OF SCHOOL SYSTEM									
	Central City (4 systems)		Urban Fringe (10 systems)		Autonomous City (10 systems)		Rural Town and County (17 systems)		TOTAL (50 systems)	
	%	No.	%	No.	%	No.	%	No.	%	No.
U Is instruction given to acquaint pupils with various ways of resolving differences among people, the effects of each and how to decide which ways are constructive (e.g. arguing vs. withdrawal, etc.)?	50	2	32	6	20	2	24	4	28	14
X Is instruction given to help students learn and practice a constructive approach to inconsistencies in the adult society?	25	1	5	1	0	0	0	0	4	2
Z 1 Is instruction given to help students build a feeling a self-respect and personal significance?	50	2	16	3	40	4	6	1	20	10
Z 2 Does instruction include the effects of different ways of building a feeling of self-respect and personal significance?	25	1	5	1	30	3	6	1	14	7
BB Is instruction given regarding different methods of finding out what is right and what is wrong?	50	2	26	5	10	1	0	0	12	6
CC 1 Is instruction given to help pupils in establishing one's own philosophy of life?	25	1	21	4	10	1	0	0	10	5
CC 2 Does instruction include opportunities to practice using it in daily decisions?	0	0	11	2	0	0	0	0	4	2

9b. Developing a Philosophy of Life — Secondary Level

The student learnings at the secondary level dealing with building a philosophy of life and related topics were examined through a test and a curriculum interview. The test contained six multiple choice questions designed to measure the student's probability conception of knowledge, which is an important aspect of one's philosophy of life. Each statement presented an everyday situation together with five alternative responses.

The reliability for this test is .47 (Kuder-Richardson "20"). The total mean score for all students was 3.24, approximately 54 percent out of a total possible score of six. Analysis of variance indicates that there was a significant difference between type of school system (F of 8.51 significant at the .001 level of confidence) but no significant difference between the sexes. The means for seniors on this test were still below a level which would indicate an adequate conception of the probability nature of empirical observations.

Teenage values were explored by examining the seniors on attitudinal Statements 1, 8, 9, 11, 19, 26 and 39 adapted from Schofield's Study, *The Sexual Behavior of Young People*. The statements were as follows:

Statement 1: Life is so short that having a good time is more important than anything else.

Statement 8: Teenage boys spend too much time thinking about their clothes and hair styles.

Statement 9: Girls believe today that if they are not married before they are 21 they are on the shelf.

Statement 11: TV and radio programs have a strong influence on most teenagers.

Statement 19: I think I'll have a better job than my father has when I am his age.

Statement 26: Today's teenagers are very different from teenagers of the past.

Statement 39: Most teenagers are bored with life.

Sharp differences were found between boys and girls on all statements except Statement 39. On this item, "Most teenagers are bored with life," the majority of the students disagreed. It is interesting to note that nearly one-fourth, however, did agree with the statement, and another 12 percent were uncertain as to how they felt.

Approximately 60 percent of the students indicated that today's teenagers are different from those of the past; and nearly three-quarters of them felt that television and radio programs have a strong influence on most teenagers. This feeling was slightly higher in the cities than in other areas.

A larger percentage of girls than boys (77-69 percent) thought that having a good time (Statement 1) was not "more important than anything else." A majority of the students did not indicate that boys spend too much time on their grooming. Over 41 percent of the boys and 62 percent of the girls indicated that they disagreed with Statement 9 regarding the desirability of early marriage for girls. However, nearly one-fourth of the boys were uncertain about this statement.

A majority of the boys thought they would have a better job than their fathers (Statement 19). This was especially true with students in the central cities and rural areas. In our culture, this statement is probably inappropriate for girls.

The results from this set of items are encouraging. They suggest that the values of most teenagers are toned with optimism and idealism, yet reflect an awareness of their world. However, the values of a minority of students need careful examination: the one-third who suggest that teenagers may be bored with life; the one in about four who indicates that having a good time is an end in itself; and the one in about three or four who thinks that girls who are *not* married by

age 21 are "on the shelf." Two questions which need further exploration are: How do these values relate to the individual's larger value scheme? What are their behavioral consequences?

Overall, a low percentage of school systems offered planned instruction to secondary students in the various curricular topics related to developing a philosophy of life. The percentages ranged from 8-36 percent. Individual percentages for type of school system ranged from 0-42.1 percent. Generally, rural town and county systems gave less emphasis to these topics.

Planned instruction regarding constructive reaction to authority was offered in only 25 percent of the central city systems, in 20 percent of autonomous city systems and in less than 16 percent of the other types of systems. Systematic instruction designed to help students learn and practice a constructive approach to inconsistencies in the adult society was found in a mere six percent of urban fringe and rural town and county systems and in a somewhat greater degree in the other systems. With the exception of central cities and autonomous cities, instruction regarding different methods of finding out what is right and what is wrong was offered in a systematic fashion in only one-tenth of urban fringe systems and in no rural town and county systems.

In addition, very little planned instruction was given to help pupils to establish their own philosophy of life, as this topic was systematically offered in just 25 percent of central city systems and in only 10 percent or fewer of all other systems. The same was true with respect to systematic offerings including opportunities for students to practice using their philosophy of life in daily decisions, except that no autonomous city systems included any aspect of this in their instruction. It is apparent that the majority of school systems are not presently offering their students systematically planned instruction designed to help each student to build the proper foundation for life and to develop his own philosophy.

B. Teachers' Knowledge and Attitudes Related to Sex and Family Life Education

1a. Teacher's Knowledge About Sex—Statements 1-9, Test TA

The breadth of knowledge explored in Test TA, along with limitations in the amount of teacher time available, permitted inclusion of only nine statements related to sex knowledge. Thus most of the statements included explored teachers' knowledge of the causes of sexual behavior and the place of sex in marriage. One statement dealt with birth control and another dealt with knowledge about

venereal disease. These statements represent only a very limited sampling of the knowledge which may be required for effective sex education.

A "correct" answer for each of these statements was defined, based upon research findings reported in the literature. Scores were then determined for each individual who responded to this survey. Means and standard deviations were calculated for all participants and for respondents grouped by age (age 39 and under, age 40 and over), by sex and by type of community (central city, urban fringe, autonomous city and rural).

The overall mean scores for the sample were extremely low. Considering population groups, mean scores ranged from barely more than one-third correct for central city teachers to slightly over half correct for teachers in suburban communities. In addition, the standard deviation was relatively large, especially among the central city teachers. This suggests that some of these individuals scored very near to zero.

Examination of responses to each of the statements may be productive of insights into the reasons underlying the low scores. Each question is presented below, along with a summary and an analysis of teachers' responses.

Statement 1: A man becomes a homosexual:

A. Because his glands are not functioning properly
B. Because his physical development is more like that of a woman
C. Because his mind is warped
D. Because his childhood experience causes him to reject maleness
E. For none of the above reasons.

Homosexuality is the result of improper psychosexual development in childhood. The critical period for such development is quite early, between 18 months and three years of age. Thus, response D ("Because his childhood experience causes him to reject maleness") exhibits an awareness by the respondent of the psychological basis of such a typical sexual behavior in an adult male.

When viewed from an age group cross-section, the younger group (those 39 and under) displayed more of an awareness of the psychology of homosexual development than did the older group. Within age groups, females appeared to be more knowledgeable about the basis of the development of homosexuality than were the males.

Responses A and B associate some biological or physiological

malfunction with homosexuality. Even though studies have shown that the "learned sex role overbalances the hormonal ones," between one-eighth and one-fifth of the teachers sampled assigned physiological causes to homosexuality.

Response C received from 5.4 to 10.2 percent of the total. The over 40 group appears to consider the homosexual more of a demented person than does the 39 and under group. It is thus clear that a large number of teachers are unaware of the causes of homosexuality. In order to impart proper knowledge and healthy developmental methods to their students, these teachers must become more knowledgeable in the area of development of sexual deviancy.

Thus, approximately half of the respondents are aware of the general cause of homosexuality. A much smaller percentage of respondents feel homosexuality is caused by glandular malfunctioning, unmasculine physical development or a warped mind. Equally important along with these incorrect beliefs is response E, which considers none of the four alternatives as correct. From 13.0 to 25.9 percent answered in this manner. No matter what their reasoning is, they failed to respond to D, the most acceptable response. They also are unaware of the basis for homosexual behavior.

Statement 2: Men who philander do so because:

A. They have abnormal sex drives.
B. They are unable to gain sexual gratification from one person.
C. Some masculine subcultures encourage reward for this kind of behavior.
D. Man is naturally polygamous.
E. Man is naturally evil.

The responses about the reason why a man philanders appear to vary to a great degree with respect to both age and sex. The most acceptable response, B, deals with the inability of a man to gain sexual gratification from one person. Approximately 50 percent of the females of all ages considered B to be the cause of man's philandering. The males 39 and under rated this response almost as frequently, while the males 40 and over considered B less of a reason (28.4 percent).

The most consistent response for both sex and age is C, the fact that some masculine subcultures encourage and reward such behavior. The percentages who responded to C are limited in range from 14.0 to 14.8 percent. The efforts of the various masculine subcultures are in fact even more pronounced than the percent of responses to C would indicate. The association of philandering with A, abnormal sex drives,

appears to be much more creditable in the age 40 and over group than in the age 39 and under group.

An evident difference between the sexes stands out in response D, the association of philandering with man's naturally polygamous ways. The males are quite favorable to answer D (13.8 percent, 21.0 percent) while the females are less inclined to consider polygamous nature as a cause of philandering (7.6 percent, 8.6 percent). Upon viewing the age categories, the 40 and over group believes more strongly in the polygamous nature than does the 39 and under group.

Approximately 86 percent of the teachers of both sexes and both age groups failed to display an awareness of the effect of learned behavior upon the cause of philandering men.

Statement 3: A wholesome sexual relationship between husband and wife:

A. Depends on repression of man's evil tendencies.

B. Results from normal biological drives.

C. Is enhanced by premarital sexual experimentation.

D. Develops over time and, hence, is at least partly a learned behavior.

E. Is largely a matter of chance.

Responses to the reasons for a wholesome sexual relationship between husband and wife followed a predictable pattern. Response D, which is considered the most causative factor for a wholesome sexual relationship, received from nearly one-half to nearly three-quarters of the responses. The younger teachers tended to choose D more frequently than the older teachers, while men of all ages appeared to be more consistent in choice of D than were the women in both age groups. Marked differences were observed between women in the two age groups.

Response B also received a good number of supporters. The importance of normal biological drives cannot be overlooked, but it also must not be considered the sole cause of a wholesome sexual relationship.

Responses A, C and E received very little reaction and thus are not notably significant.

Thus, a response to B is not incorrect; it is merely incomplete. When this drive is also identified with the development of learned sexual behavior (response D), a wholesome sexual relationship may be the result.

Statement 4: What is the relation between being sexually attracted to a man or woman and being in love with that person?

A. Sex attraction is physical desire; love is an attitude.

B. Sex attraction and being in love are the same thing.

C. If there is no sex attraction, there can be no love.

D. Sex attraction may mean that love is also present.

E. If there is no love there will be no sex attraction.

Only two responses (A and D) received any significant reaction in the association of love and sexual attraction. Response A was received with greater favor by the younger teachers than by the older ones. In a sexual cross-section the males responded slightly more to A than did the females. Conversely, response D received somewhat greater backing from the older teachers, and the females responded slightly more than did the males of their respective ages.

Statement 5: Sex relations are:

A. For physical pleasure

B. A way to relieve tension

C. A way to express love

D. A biological urge

E. All of the above

Over half of the respondents feel that all of the answers are in some way characteristic of sex relations. Response E obtained relatively consistent approval from both sexes and both age groups. The younger men responded the most favorably in this area, while the younger women responded least favorably.

The identification of sex relations with an expression of love received some acclaim in response C. Men of all ages were consistent in their views toward C, while younger females (approximately one-quarter) weighted C more heavily than the older females did.

Responses A and B received few votes, while D scored higher in the older teacher group than in the younger one.

Statement 6: What is the usual reason for "wet dreams?"

A. Abnormal or excessive sex desire

B. Lack of self-control in sex feelings and desire

C. A need for sex outlet or sex tension resulting from a sex dream

D. Sex tension caused by sex thoughts before sleeping

E. Strong desire for sex relations with someone who is not available

The reason for "wet dreams" was associated with the need for a sex outlet. Response C received just over 60 percent of the answers. The younger teachers were very consistent in this response, while older male teachers responded to C the most and the older female teachers responded to C the least.

Response E received the next largest number of answers, with the younger teachers still being very consistent. The responses of the older teachers to E were fewer than the younger teachers, with the older females responding more heavily than the older males.

B received a consistent, yet small, following from the females of all ages, while older males were the most in favor of this response and the younger males the least in favor.

A received no significant number of responses, while D scored more strongly among the younger male and older female teachers. Response D received a consistent, but very small, reaction from the older male and younger female teachers.

Statement 7: When they are used in the correct way, how reliable are modern methods of birth control?

A. Completely reliable

B. Highly reliable

C. Only moderately reliable

D. Slightly better than no method

E. Very unreliable

Approximately two-thirds of the teachers surveyed recognize that modern methods of birth control are highly reliable. About one teacher in 10 from the under 40 group believes that they are completely reliable, whereas the older group is more skeptical of the dependability of birth control techniques. This difference may be based partly on outdated information held by the teachers in the over 40 group or may reflect some naivete on the part of the younger group. In any event, about one-third of the teachers are ill-informed about the reliability of methods of preventing conception.

Statement 8: Happily married couples usually have sex relations:

A. Whenever they can; every day if possible

B. When the woman wants to
C. Whenever the man wants to
D. When both need sex outlet
E. When it is pleasing to both

Approximately two-thirds of the men and four-fifths of the women chose the most acceptable response to this question. This result indicates that most teachers identify sex as a fulfilling and mutually pleasurable function for both husband and wife. However, about one man in five and one woman in ten do not recognize this function. Therefore, re-education of a proportion of the teachers appears to be necessary if a wholesome understanding of the role of sexual relations in marriages is to be fostered among all students.

Statement 9: How curable are syphilis and gonorrhea (V.D.)?

A. Almost every case of either disease can be cured.
B. Some cases of both diseases can be cured.
C. Syphilis cannot be cured; gonorrhea is easily cured.
D. Gonorrhea cannot be cured; syphilis is easily cured.
E. These diseases can be cured only if treated soon after infection.

Just under half of the respondents favored response E. Both the males and females of the younger and older groups responded quite consistently with each other. Both C and D, which states that either one or the other of the diseases is incurable, received little attention.

In response A, the young male teachers were less optimistic than the other teachers about the curability of almost every case. The remaining older male teachers and all of the female teachers scored just under 25 percent for this response.

Feeling that some cases of both diseases can be cured (response B), all of the men responded at the same level, while more older women responded in this manner than did their younger counterparts.

SUMMARY

Results of this test indicate that a substantial portion of teachers do not recognize the role which learning plays in the psycho-sexual development. This is especially evident in relation to sexual deviation from societal norms as exemplified by items concerning philandering and homosexuality. There is, generally, a greater awareness of the

role of learning among younger teachers, especially young women. Moreover, in relation to more technical aspects of sex, at least one-third of the teachers are inadequately informed. They do not seem to appreciate multiple causality as it relates to sex (Statement 6). About one teacher in three has inadequate information on the reliability of birth control devices, and three-fourths of the teachers tested chose an answer other than the most appropriate one on a statement examining knowledge of V.D.

These data indicate that teachers' knowledge about sex needs updating and improving if family life education programs are not to be plagued with misconceptions and erroneous information. This is not surprising, since much of the teachers' knowledge about sex was realized from age-mates during childhood and adolescence. The implications of these findings are clear: teacher education should be an important component of any effort to have teachers and pupils interact intelligently about sex.

2a. Teachers' Attitudes Toward Family Life Education

The impact of teacher attitudes on the success or failure of family life education programs has been documented.[1] Therefore, teacher attitudes toward eight issues which are related to family life education were explored in this test by means of a semantic differential. These issues were:

(1) Teaching about family living in school
(2) Myself teaching about sex
(3) Teaching about the use of alcohol, drugs and tobacco
(4) Sex in marriage
(5) Premarital sex
(6) Teenage masturbation
(7) Smoking marijuana
(8) Using drugs for "kicks"

The first three were included as a means of examining teachers' attitudes toward inclusion of family life education in the instructional program. The remaining items were designed to explore teacher attitudes toward two major areas of family life education — sexual behavior and drug use. These do not represent all of the dimensions which need exploration, but they do include some of the more sensitive areas which are of paramount interest to school students.

[1] L. A. Kirkendall. Using a Student Panel in Teacher Education on Sex Standards. *Journal of Marriage and The Family* 28: 521-523, 1963.

It will be recalled that the semantic differential used in this survey consisted of 13 bi-polar scales:

IMPORTANT	—	UNIMPORTANT
DESIRABLE	—	UNDESIRABLE
HEALTHY	—	UNHEALTHY
PLEASANT	—	UNPLEASANT
EXCITING	—	BORING
ENJOYABLE	—	UNENJOYABLE
GOOD	—	BAD
CLEAN	—	DIRTY
RIGHT	—	WRONG
SAFE	—	DANGEROUS
"IN"	—	"OUT"
ACCEPTABLE FOR TEENAGERS	—	UNACCEPTABLE FOR TEENAGERS
ACCEPTABLE FOR PEOPLE OVER 21	—	UNACCEPTABLE FOR PEOPLE OVER 21

A five-point scale was used throughout, and integral values were assigned for scoring, ranging from one for the least favorable response to five for the most favorable response.

The 13 scales were grouped into four major categories:

Value	—	Scales 1-3
Pleasure	—	Scales 4-6
Morality	—	Scales 7-9
Social Acceptability	—	Scales 10-13

Since the value, pleasure and morality categories each consisted of three scales, the maximum possible score for each category was 15. A score greater than nine would suggest a favorable attitude, and less than nine would indicate an unfavorable attitude. The sociability category contained four scales; consequently, the maximum possible score was 20. A score greater than 12 would indicate a favorable attitude, whereas a score less than 12 would be related to an unfavorable attitude.

Individual responses were totaled as outlined above, and mean and standard deviations were computed. Two-way analysis of variance was also determined using Winer's Case I for unequal cells.

Concept 1 — Teaching About Family Living in Schools

A two-way analysis of variance was performed, using age and sex as variables. This showed significant ($p<.05$) F-ratios related to age for three of the categories — pleasure, morality, and sociability. None of the F-ratios for sex or for the interaction between the main effects was statistically significant. These data suggest that younger

teachers hold more favorable attitudes toward the inclusion of family life education in the school curriculum.

Further analysis of data shows that males from autonomous cities and the central city and females from suburban schools demonstrate less favorable attitudes than other groups regarding inclusion of family life education in the school program.

It should further be noted that scores are lowest in the "pleasure" category. This would suggest that while teachers see teaching about family living as important, desirable and socially acceptable, they do not view it as an enjoyable part of their teaching.

Concept 2 — Myself Teaching about Sex

Reluctance of teachers to discuss sex in class may be a serious obstacle to the initiation of family life education programs in the schools. What are teachers' attitudes toward teaching about sex? This question was explored by the use of a semantic differential entitled "Myself Teaching about Sex."

Two-way analysis of variance shows that differences between the two age groups and between males and females are statistically significant ($p<.05$). From these data, one can infer that younger teachers and male teachers have more favorable attitudes toward their involvement in teaching about sex.

From data for this concept, with community type and teacher's sex as independent variables, analysis of variance yielded significant F-ratios ($p<.01$) for the main effects. Interaction effects were significant ($p<.05$) for the morality and social acceptability categories. Women and teachers from autonomous cities exhibited less favorable attitudes toward this concept.

In two instances in the pleasure category, females from autonomous cities and females from rural areas, the mean fell below nine. Scores below nine in the value, pleasure and morality categories are suggestive of unfavorable attitudes. From these results it would appear that the general feeling of women teachers from non-metropolitan areas is somewhat negative toward teaching about sex.

As with the first concept, teachers do not view teaching about sex as an enjoyable part of their work. Lowest scores are found in the pleasure category on this concept. This is consistent for both age groups, both males and females, and for teachers from all four types of communities.

Concept 3 — Teaching about Alcohol, Drugs and Tobacco

Another domain of family life education in which teacher attitudes are important relates to instruction concerning the effects of drinking, smoking and the use of drugs. To explore this a semantic differential entitled "Teaching About Alcohol, Drugs and Tobacco" was used.

When respondents were grouped by age and sex, significant differences were found on the pleasure category ($p<.01$).* As in the previous instance, more favorable attitudes were found among younger teachers and among males. However, no significant differences were found in the other categories — value, morality and social acceptability.

Differences also were found between teachers from different types of communities ($p<.01$). However, the only statistically significant interaction effect was found on the pleasure category ($p<.05$). By and large, teachers from urban fringe and rural communities held more favorable attitudes than their counterparts in city schools toward teaching about alcohol, drugs and tobacco. Also, there is a tendency for males from suburban and rural communities to have more favorable attitudes, which is demonstrated on the two concepts discussed above, as suggested by these data.

Some general observations about all three concepts, which relate to family life education, can be made from collected data:

(1) Consistently lower scores are found on the pleasure category when contrasted with the value, morality and social acceptability categories. This would indicate that teachers recognize the need for instructing children in the area of family life education but are also aware that the task may be a difficult one.

(2) Teachers in city schools (either in metropolitan areas or autonomous cities) appear to have less favorable attitudes toward teaching about family living. An interesting question for further study would concern the factors which contribute to this. Are less favorable teacher attitudes attributable to differences in teacher characteristics such as age or sex? Or, are teachers' attitudes reflective of discrepancies in outlook between themselves and their pupils?

(3) Females and older teachers generally hold less favorable attitudes toward family life education.

(4) When responses of teachers on the three concepts were con-

* Using a two-way analysis of variance.

trasted, the most favorable response was to Concept 1, "Teaching about Family Living in School," and the least favorable to "Myself Teaching About Sex." Three factors may contribute to this result:

a. A general cultural taboo on sex

b. Acceptance of the notion of family, in principle, coupled with a degree of rejection of its more personal or sensitive areas, and/or

c. The first person nature of the statement "Myself Teaching about Sex" (i.e., a reaction such as, "It's desirable, but I don't want to do it")

(5) For the most part, teacher attitudes toward family life education, including sex education, are favorable. In only two instances did mean scores fall below the midpoint of the differential scale. In most instances a substantial majority of the teachers sampled demonstrated favorable attitudes.

Concept 4 — Sex in Marriage

Teachers' attitudes toward the role of sex in marriage could have a significant impact on the kinds of messages that are conveyed to students in a family life education program. Unfavorable attitudes of teachers could have a deleterious effect on future marriage relationships of students, whereas wholesome attitudes could have beneficial effects on students' outlook on marriage.

A semantic differential entitled "Sex in Marriage" was administered as part of Test TB.

Analysis of variance on collected data produced significant F-ratios ($p<.01$) in the following cases:

(1) Males generally responded more favorably than females in all categories except value.

(2) Younger teachers responded more favorably than older ones in all categories.

(3) Interaction effects were not found to be significant in any category.

Further collected data, when subjected to analysis of variance, showed that teachers from schools in metropolitan areas held more favorable attitudes toward the social acceptability of the concept ($p<.01$).

Concept 5 — Premarital Sex

Premarital sex is an issue which is usually discussed at some

point in family life education programs. It must be dealt with frankly and rationally, but at the same time, it is a complex issue on which teachers' attitudes may have serious impact.

With the exception of the pleasure category, all mean scores were below nine, suggesting negative attitudes to this concept. However, the mean scores were substantially above the lower limit of three, which would occur if teachers were to mark the scale at the extreme. Even in the "morality" category, responses ranged from a mean of 4.5 for women age 40 and over, to 6.9 for men age 39 and under.

All F-ratios arising from analysis of variance of data (teacher age and sex as independent variables) were significant at $p<.01$ with the exception of those for the interaction effects in all categories. Younger teachers and males held significantly more "liberal" attitudes toward premarital sex than did older teachers and females. This result was consistent for all categories — value, pleasure, morality and social acceptability.

Similarly, analysis of variance of data (teacher sex and type of community as independent variables) yielded significant F-ratios for all main effects. Highest mean scores were found among males and among teachers from urban fringe schools. Lowest mean scores were found among female teachers from rural schools.

Mean scores and also standard deviations were highest for responses in the pleasure category. Men showed significantly higher mean scores than women. However, the variability among women was greater than that of men, with the greatest variability being among women 40 and over, and among women from the inner city.

In summary, attitudes of teachers toward premarital sex, as indicated on a semantic differential, could be typified as restrained negativism. One could infer from these data that teachers recognize that premarital sex can have undesirable consequences, but they do not unreservedly condemn it. Moreover, more "liberal" attitudes are found among younger teachers and among males.

Concept 6 — Teenage Masturbation

The primary form of sexual activity among teenagers is masturbation. Some writers have suggested that it serves some important functions in psycho-sexual development. In any event, the detrimental effects attributed to masturbation, such as loss of physical strength or mental capability, have no foundation.

Analysis of variance of collected data shows that differences between males and females were significant for all categories; and in the pleasure and social acceptability categories, younger teachers demonstrated more favorable attitudes. Interaction effects were significant in all categories accept morality.

Comparison of data collected for Concept 6 with data collected for Concept 5 (Premarital Sex) shows that all means in the value, morality and social acceptability categories were higher for "Teenage Masturbation." However, teacher responses indicated "Premarital Sex" more pleasurable.

Analysis of variance of data for teachers grouped by sex and type of community yielded significant differences ($p<.01$) for all main effects and for interaction effects for the pleasure category ($p<.05$). Examination of Table IV-97 shows that teachers from central city schools generally ranked this concept higher than other teachers, whereas teachers from autonomous cities and rural areas generally ranked it lower than their professional associates from metropolitan areas.

Highest scores appeared in the pleasure category, whereas the responses in the other three categories were essentially equivalent. (*N.B.* The social acceptability category contained four scales, whereas the other three each contained just three scales. Consequently scores in the category labeled "S" may appear higher comparably than others). These data suggest that, although teachers do not hold favorable attitudes toward teenage masturbation, they have some feeling for its place in adolescent experience and consequently their attitudes are not totally negative. What was said with regard to teachers' attitudes toward premarital sex can also be said of their attitudes toward masturbation — perhaps a bit more affirmatively.

Concept 7 — Using Drugs for "Kicks"

Since drug use comes under the domain of family life education, understanding teacher attitudes toward it is important. A semantic differential entitled "Using Drugs for Kicks" was included in Test TB.

Analysis of variance of data for teachers grouped by age and sex indicated that males scored significantly higher in the pleasure and morality categories and that younger teachers' responses showed greater awareness of the increasing social acceptance (at least in term-culture) of drug use. When data for teachers grouped by sex and type of community were subjected to analysis of variance, differ-

ences were found ($p<.01$) between suburban and other types of communities in the pleasure and social acceptability categories. More "liberal" attitudes were expressed by the former group in these categories.

The lowest mean scores were those for teachers in central city schools on all categories except value, and the highest scores were generally those of teachers in urban fringe schools. This would suggest that teachers in the inner city, those who are closest to the problem of drug use, reflect the urgency of the situation in terms of more negative attitudes. However, although the differences between groups were statistically significant, they were in fact, small. Thus, teachers generally hold negative attitudes toward frivolous drug usage.

Concept 8 — Smoking Marijuana

Use of marijuana recently has received much attention in the mass media. Controversy exists over its deleterious effects, with some advocates stating that it is neither more harmful nor more habit forming than alcohol. A semantic differential entitled "Smoking Marijuana" was included to explore attitudes of teachers toward its use.

Differences in attitudes between male and female teachers were statistically significant ($p<.05$) for all categories. A difference between age groups was found only on the social acceptability category, with the mean score for younger teachers being higher. However, the mean for all groups was low (6.5 or less) on the social acceptability category. Consequently, the higher mean score for younger teachers may reflect only a greater social awareness and should not be interpreted as suggesting that they favor use of marijuana.

Comparison of data collected for Concept 8 with data collected for Concept 7 (Using Drugs for "Kicks") shows that, for every cell, the mean score was higher for Concept 8. This suggests that perhaps the generic term "drugs" elicits less favorable attitudes than the specific referent "marijuana." Or it may indicate that arguments about marijuana's non-deleterious effects are influencing attitudes.

When responses of teachers from different types of communities were analyzed, significant differences ($p<.01$) were found for both main effects in all categories. Lowest mean scores were those of teachers from rural areas; whereas highest mean scores were those of central city teachers in all but the pleasure category. This latter

result is inconsistent with the findings from Concept 7 for central city teachers.

Discussion

The data presented above provide hopeful signs for the future. Generally speaking, teachers' attitudes are favorable toward the inclusion of family life education in the school program. Although they may be somewhat apprehensive about personal involvement in it, as is evidenced by the lower scores in the pleasure category for concepts 1, 2 and 3, teachers recognize its value and significance in today's world. Moreover, teachers' attitudes toward sex and drug use, as indicated by their responses for concepts 4-8, show evidence of their ability to deal realistically with boys and girls on these issues. As one would expect, teachers do not hold favorable attitudes toward premarital sex, teenage masturbation and drug use. However, neither is a total condemnation of these in evidence. Instead an attitude of understanding seems to prevail.

A rather consistent result throughout this study has been the different responses of males and females, and younger and older teachers. The evidence indicates that younger teachers (age 39 and under) and males hold more "liberal" views. In some cases, this trend did not persist. For example, on Concept 3, men from autonomous cities responded less favorably than did women from the same type of community. From these data, one might ask if situations, or concepts, of a nature different from the eight presented on Test TB might not have elicited different responses. A question which may have significance here is "Are more men generally more 'liberal' than women, or does one's 'liberalism' depend upon the context?"

A note of caution should be observed, however, in interpreting and applying the findings in local school situations. The commentary presented in the foregoing pages has been derived largely from mean scores. Consequently, it refers to the hypothetical "average" teacher. The variability among teachers was given little attention; and, in the application of results, this may have more significance. In all cases, the variation among teachers within each group exceeds the variation between the groups. Consequently, in identifying people to teach family life education programs, it appears essential to search for individuals whose attitudes are compatible with the program's objectives.

3a. Teachers' Understanding of Child Behavior

The third survey instrument for teachers was designed to measure their understanding of child behavior. The teacher was given two descriptions of classroom behavior situations and asked to briefly react to three questions about each: "You may have had a student somewhat like (name of student). Why do you think some children behave this way?" "Why do you think (name of student) is behaving this way?" "What do you think the teacher should do about this situation?" (What have you tried in similar cases that might help?)

The responses of the teachers to these questions were analyzed and rated for both situations relative to three important aspects of teacher approaches to child behavior: (1) Do the responses indicate an awareness of the multiple causation of behavior? (2) Do the responses indicate an awareness of the effect of the teacher's own behavior on the student's behavior? (3) Do the responses indicate a sensitivity to the student's responsibility in guiding his own development? The teachers' responses were rated either yes, no, or doubtful by two members of the research staff.* The reliability of these ratings was determined by the intraclass correlation method described by Ebel. The reliability for both raters combined or for the average of their ratings is .79.

About 69 percent of the total of elementary teachers were thinking in terms of the multiple causation of behavior, while only 11 percent seemed aware of the effect of their behavior in the etiology of behavior disturbances. Approximately 17 percent of all elementary teachers recognized the possibility of helping the pupil take some responsibility for his own development. It is quite apparent that the majority of elementary teachers were unaware of the possible effects of their own behavior and were not sensitive to the student's responsibility in guiding his own development.

The results for secondary teachers did not differ greatly from those of elementary teachers. Overall, secondary teachers were thinking a little less in terms of multiple causation, but were slightly more aware of the effects of their behavior on the student and were a little more sensitive to helping the student take some responsibility for his own development.

Overall about two-thirds of the total teachers possessed an awareness of the multiple causation of behavior, while approximately one-

* The two members were Linda Weatherholt and David Hyde.

eighth indicated an awareness of the effect of their behavior on that of the student, and about one-fifth were sensitive to the student's responsibility in guiding his own development. These last two findings indicate an appalling lack of understanding on the part of teachers of some important dimensions of the understanding of child behavior and the teacher's approach to it.

C. *Principals' Understanding of Child Behavior*

The third survey instrument for teachers was also administered to principals in order to measure their understanding of child behavior. The two behavior situations and the questions asked about them were the same as for the teachers. The principals' responses were analyzed and evaluated in the same manner as those of the teachers.

Overall the principals did not fare as well as the teachers. About 64 percent of the principals have an awareness of the multiple causation of behavior. A mere nine percent of the principals indicated an awareness of the effect of the teacher's behavior on the student's behavior, and only 18 percent indicated a sensitivity to the student's responsibility in guiding his own development. These latter two findings are indicative of a great lack of understanding by principals of some critical aspects of an understanding of child behavior.

Chapter V

SUMMARY OF FINDINGS AND RECOMMENDATIONS

1. The results of the test concerned with pupil understanding of human behavior indicated a very low level of sensitivity to the multiple causative nature of behavior. Furthermore, the interviews with the curriculum coordinators indicated that very little attention is given to helping pupils develop an understanding and appreciation of the nature of human behavior.

The significance of these findings for a program of education in the areas with which this survey is concerned may be indicated by several examples. In interpreting these examples it is helpful to recall the basic dynamics of human behavior as they were developed in the section of this report dealing with the determination of developments desired. A given form of overt behavior may have many different causes and its meaning may vary with the underlying causes. Nevertheless, in our culture such questions as the following are frequently asked: Do you favor premarital intercourse? Is masturbation harmful? Do you approve of student protests? All of these questions deal with forms of behavior that may be quite different in underlying causes and thus cannot be logically answered unless the underlying meaning is known. Sex behavior which is essentially exploitation of an individual is not the same as sex behavior where there is mutual love and confidence. Student protests which represent a reasoned attempt to change an out-dated condition are not the same as student protests which are essentially a drive for arbitrary power.

Furthermore, a given form of abuse behavior often represents an attempt by the individual to resolve some difficulty which he is experiencing. Often programs in drug, alcohol and tobacco education are principally confined to the discussion of the effects of abuse behavior and give little attention to helping youth identify the basic problems or frustrations that tend to give rise to this behavior and how the difficulties can be resolved in more constructive ways.

A sensitivity to the causal nature of behavior would lead not only to a recognition that a given form of overt behavior may have different causes but also that abuse behavior often is an attempt by the individual to solve a difficulty, that it is not sufficient to teach only the effects of such behavior but consideration must be given to helping youth to identify some of the frustrations that often give rise to such behavior and how these difficulties can be worked out more constructively.

Thus the observation that the results of the tests of pupils and the examination of curricular offerings reveal little understanding and appreciation of the nature of human behavior takes on tremendous significance. A very important part of the basic equipment young people need to deal with the social concerns of youth is currently not being supplied.

2. The data obtained from the teachers and principals indicate that, although there is a beginning awareness of multiple causes, some very important and crucial causes are not appreciated. For example, there is little awareness of the effect of the teacher's own behavior on the student and there is practically no appreciation of the possibility of teaching the pupil the elements of behavioral science so he can understand human frustrations and how to go about finding constructive resolutions. The knowledge, attitudes and behavior of teachers and principals are especially crucial for the education in human behavior, since these adults in authoritative positions provide demonstrations in human interaction from which the pupil learns. These demonstrations can help or hinder such learning.

3. The findings relative to the attitudes of youth toward sex suggest that youth places great emphasis on individuals' deciding for themselves issues of right and wrong. The authority of the church, family and other cultural institutions is being questioned. Youth indicate they learn more about sex from their friends than from their parents. They want the schools to teach them about sex, including such topics as birth control.

Since they are questioning the authority of such institutions as the family and the church and want to decide for themselves, it is important that instruction includes help in learning how to make moral decisions. This involves ways of dealing with sex feelings, including long-range consequences of alternative ways of dealing with such feelings.

Data obtained relative to curricular offerings, however, show that instruction tends to focus on technical or factual knowledge about sex and human development and tends to omit the long-range effects of various forms of behavior and the emotional, judgmental and causal aspects. It appears that many schools are not supplying what the student needs to learn how to resolve the most significant issues related to sexuality — namely, its emotional basis and how to deal with it.

4. The results of the test of teacher's knowledge about sex indicated that this area needs considerable up-dating if family life education programs are to be effective. Teacher attitudes were favorable toward the inclusion of family life education in the school program and the younger teachers were more favorable to their own participation in sex instruction than older teachers. Furthermore, their attitudes toward the problems of sex and drugs revealed a sympathetic understanding rather than a total condemnation of youth behavior in these areas.

5. The data relative to the use of drugs indicated that students possess some awareness of the effects of drugs though not as much as appears desirable for effective decision making in this area. They show considerable lack of knowledge of methods for solving constructively the types of difficulties that tend to give rise to abuse behavior. Furthermore, the examination of the curricular offerings indicated that although much is included by way of effects of use of drugs little is provided to help students identify the difficulties that tend to produce abuse behavior and to learn constructive methods for their resolution.

6. The data concerning the use of tobacco and alcohol suggest that young people feel the use of these substances is largely influenced by the social satisfactions they derive from the activities of smoking and drinking.

There is a tendency on the part of students to give consideration to the immediate satisfactions rather than the more remote effects which may develop. This presents an interesting situation for alcohol

and tobacco education. Most of the teaching now offered in the schools is concerned with the long-range effects. On first sight this would appear adequate. There is, however, another aspect to the problem. There are immediate satisfactions which students derive from such an activity as smoking and, as the data indicate, these satisfactions are in the social area. Smoking may help them to feel they are part of the group. It may help them feel grown up. It may satisfy the feeling of independence from adult dictates.

Current curricular offerings, however, give little attention to these underlying feelings. Feelings that are now satisfied by smoking can be satisfied in more constructive ways once the student learns how to do this. In current teaching programs little attention is given to helping the student understand the behavior, the needs it satisfies and how these feelings can be satisfied in more constructive ways.

The picture that seems to emerge from the analyses of the data relative to use of drugs, alcohol and tobacco is one in which such instruction as is currently provided is concerned with the effects of these substances but rarely is it directed to the basic problems which give rise to abuse behavior. It appears that if an educational program is to be truly effective in preventing the development of abuse behavior it will have to concern itself not only with the effects of the abuse behavior but also with the problems young people face in daily living. It will have to help them to identify the nature of the difficulties and to become skillful in resolving them constructively. As we shall see later, this involves learning to consider alternative ways of solving difficulties, examining the alternatives in terms of their effects and then deciding which effects one wants.

7. Both elementary and secondary students have a fair knowledge of the nature of aggressive behavior and some of the feelings that may underlie it. It appears, however, that they have acquired the knowledge from sources other than the school. Only 28 percent of the schools at the elementary level and 30 percent at the secondary level offer systematic instruction relating to aggressive conflict and how to resolve differences among people by more developmental methods.

8. The data relative to the pupil's conception of the teacher's function and his confidence in the teacher as an understanding guide indicated that much remains to be done to help students enrich their conception of the function of the teacher and to increase their confidence in the teacher as an understanding guide. The data also indicated that very little systematic help is given the student in "learning how to learn"

ınd how to use this knowledge in the teacher-pupil relationship.

). The examination of the curricular offerings at both the elementary ınd secondary levels as it relates to learning constructive reactions to ıuthority (nature and purpose of rules, what to do when a rule is ıot helpful, etc.) indicated that only a fourth of the school systems give ;ystematic attention to these areas.

10. Systematic curricular offerings related to dating behavior are ɔresently found in about half of Ohio schools but such important as-ɔects as the differences between mutually constructive and non-:onstructive dating behavior are provided in only about one-third ɔf the school systems.

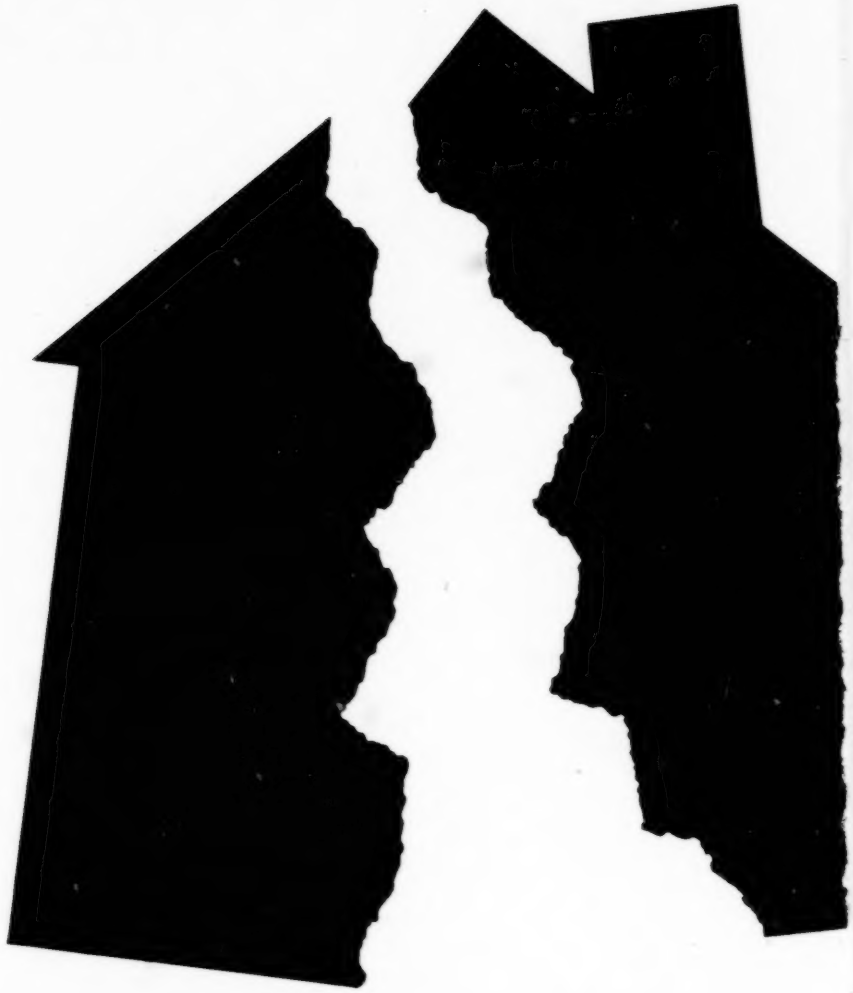
11. Systematic instruction in preparation for marriage and parenthood s provided in about half of all school systems. In about one-quarter to ɔne-third of the school systems the instruction is given separately to boys and girls.

12. The examination of curricular offerings designed to help the individual in building his philosophy of life indicated that very little is being *done* by way of systematic instruction in developing and applying a philosophy of life. Little is being done to help youth understand the inconsistencies they see in adult society, to build up their appreciation of the probability nature of knowledge and to learn ıow to develop and apply a philosophy of life.

The overall picture of education as it relates to the four social problems of youth with which this survey is concerned — sex behavior, abuse of drugs, alcohol and tobacco and use of violence — is both an interesting one and a cause for concern. In the drug, alcohol and tobacco areas there is considerable emphasis on long-term effects of abuse of these substances but little attention is given to identifying and working out in more constructive ways the problems that tend to give rise to this behavior. In the sex area there are many tabulations of methods people use to satisfy sex and related impulses but little consideration is given to long-term effects. With respect to aggressive behavior similarly there are descriptions of the many different forms violence may take but little as to long-term effects.

In all areas the student receives little help in understanding and identifying the difficulties that tend to give rise to abuse behavior, alternative methods for resolving these difficulties, the effects, especially long-term, that the alternatives tend to have and finally, how

to decide what effects one wants. These items are all aspects of decision making in the moral area; all are needed for building a constructive life, and all to a greater or lesser degree are lacking in the present school curricula. The task facing us is becoming clearer.



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